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# USSR Report

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16 November 1984

# USSR REPORT

## ECONOMIC AFFAIRS

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## ECONOMIC POLICY, ORGANIZATION AND MANAGEMENT

### ECONOMIC EXPERIMENT GOALS, TASKS, PROBLEMS DEFINED

Moscow POLITICHESKOYE SAMOOBRAZOVANIYE in Russian No 9, Sep 84 pp 12-19

[Article by A. Galkin: "The Economic Experiment: Goals, Tasks, Problems"]

[Text] The entering by the country of a qualitatively new stage of development, the stage of mature socialism, requires the changeover of the economy to the intensive type of reproduction, while this, in turn, dictates the need for the improvement of the entire economic mechanism. The CPSU Central Committee and the Soviet Government have specified the basic directions of the reorganization of the economy, on which economic organs and party, soviet, trade union and Komsomol organizations should focus attention. First of all, Comrade K. U. Chernenko stresses, it is necessary to consolidate centralized management and planning. But, he notes, the utmost development of economic initiative and creativity at the levels of economic regions, associations and enterprises is also no less important. The economic experiments being conducted in the country are also aimed at this.

The experiment has been conducted since the beginning of this year in conformity with the decree of the CPSU Central Committee and the USSR Council of Ministers "On Additional Measures on the Broadening of the Rights of the Production Associations (Enterprises) of Industry in Planning and Economic Activity and on the Increase of Their Responsibility for the Results of Work." Five sectors of the national economy--heavy and transport machine building, the electrical equipment industry of the country, as well as the food industry of the Ukrainian SSR, light industry of the Belorussian SSR and local industry of the Lithuanian SSR--have joined in it. Starting in 1985 the enterprises and associations of a number of union and republic industrial ministries will join them.

For the purpose of improving consumer services the CPSU Central Committee and the USSR Council of Ministers have accepted the proposal of the RSFSR Council of Ministers on the conducting in the system of the RSFSR Minister of Consumer Services starting on 1 July 1984 of an economic experiment on the broadening of the economic independence of personal service enterprises. The enterprises of the Bashkir ASSR and Komi ASSR ministries of consumer services and the consumer services administrations of the Altay Kray Soviet Executive Committee and the Astrakhan, Ivanovo, Kemerovo, Saratov and Yaroslavl oblast soviet

executive committees have begun to work under the conditions of the experiment. Starting in early 1985 the number of such enterprises will be increased.

It was outlined by the decree of the CPSU Central Committee and the USSR Council of Ministers "On Improving the Planning, Organization and Management of Capital Construction" for the further improvement of the economic mechanism of the sector to carry out as an experiment starting in 1985 the construction of a number of production and social projects and apartment houses with delivery "turnkey."

In this article the basic principles and conditions of the experiments in industry and services, their positive influence--to the extent to which the already gained experience makes it possible to speak about this--on the economic activity of collectives and the new problems, which are arising during the experiment, are told about in brief.

In the work on improving the economic mechanism the greatest attention is being devoted to the questions of directly managing enterprises. The improvement of the activity of this most important structural unit of our economy is a multilevel problem. The main thing in it is the establishment of the limits of the economic independence and responsibility of production associations (enterprises). The correct solution of this problem will promote the development of the initiative of labor collectives and each worker and the strengthening of the collective consciousness and behavior of people. It should direct attention to the improvement of the end results and the increase of production efficiency.

Independence and responsibility appear as interconnected aspects of the activity of enterprises. At specific historical stages of development the problem of their combination has its own peculiarities. Thus, starting with the period of industrialization and at subsequent stages the state concentrated in its hands all the basic economic functions. The management of the economy was most centralized. This restricted the economic independence of enterprises, while their responsibility under these conditions reduced to the fulfillment of plan assignments which were set from above. Having played a definite positive role, this system under present conditions has begun to check the initiative and enterprise of labor collectives and workers and to slow scientific and technical progress. It gives rise among enterprises to the aspiration for the adoption of reduced plans and for the overstatement of orders for material resources. The activity of service enterprises is regulated by numerous centralized indicators, the initiative on the expansion of the types and forms of service and the improvement of the quality of services is being inadequately stimulated.

The optimum combination of the economic independence and responsibility of industrial enterprises depends on the degree of introduction of cost accounting. Now the task reduces to the search for the most acceptable forms of the implementation of the principles of complete cost accounting as applied to present conditions. It is important to formulate such a concept of the changeover of enterprises to complete cost accounting, the basic principles of

which could be acceptable for any sector of the economy. In particular, the large-scale economic experiment is also aimed at this.

The experiment is being conducted within the established economic relations and the prevailing systems of management. This is leaving a definite mark on the results of the experiment and their "purity." However, this does not decrease their value. The experiment is important, first, for the fact that it makes it possible to obtain a "return" quickly. Second, opportunities are created to check in practice various approaches to the solution of extremely complex, debatable problems. Third, during the experiment new problems are appearing and old ones are being aggravated, that is, it can be seen more clearly what it will be necessary to solve in the immediate future and what must be done immediately. Of course, as in any new undertaking, not everything succeeds at once. And this is natural: after all, the task of the experiment is to find the best versions.

Let us begin with the questions of the planning and evaluation of the activity of production associations (enterprises).

The assignments on the output of products in physical terms are playing a specific role among the indicators which are being established centrally under the conditions of the experiment. In the five-year plan this is the output of the basic types of products, in the annual plan this is the detailed list of descriptions of items. The centralized planning of production in physical terms makes it possible to take national interests more completely into account and to combine them better with collective and personal interests. The second distinctive trait of this system consists in the fact that the role of the indicators, which characterize the end results of the activity of enterprises and the efficiency and quality of their work, is being increased. Of course, the assignments on the increase of labor productivity, the decrease of the expenditures on production and the increase of product quality are also at the center of attention of labor collectives.

The specific nature of one sector or another and of the specific enterprise was carefully considered when elaborating the new methods of management. In machine building, for example, it was deemed advisable to regard the product cost as one of the basic indicators which characterize production efficiency. At the enterprises, at which the experiment is being conducted, this indicator is one of the most important when evaluating the activity of the collective during the tallying of the results of management and socialist competition; it now directly affects the amounts of the incentive funds and the crediting of bonuses to workers.

In labor collectives of the sectors of group B the conditions are different. The expenditures on production here fluctuate to a greater extent subject to the demand of the population for goods. The production cost not only changes by years, but also fluctuates significantly during the year depending, for example, on the structure of the agricultural raw materials which are being delivered for processing. The profit serves as the most vivid indicator of the efficiency of the work of these organizations. Therefore here it not only is planned by way of directive, but also is made the basis for the evaluation

of the cost accounting activity of enterprises and the formation of their material incentive fund and for the payment of bonuses for workers.

In the system of evaluation indicators the leading role is assigned to the indicator of the sales volume in conformity with concluded contracts. It should be stressed that this indicator includes the value of only those items which have been delivered to consumers in conformity with contracts and on the set date. This increases the role of enterprises in the assurance of the balance of the national economy. The influence of such a factor as the effective demand of the consumer and the time of the transportation of products and of other factors, which do not depend on the supply enterprise, is decreasing. This is increasing noticeably the objectivity of the evaluation of the labor of the collective and, consequently, its material and moral interest and responsibility. The aspiration of enterprises for the production of so-called profitable products for the purpose of increasing the total production volume in value terms is decreasing significantly. The main thing here is the production of specific items.

For the determination of the assignments on the increase of labor productivity and the standards of the formation of the wage fund it is deemed advisable to use the indicator of the standard net output. Under the formed conditions precisely it reflects most completely the internal labor expenditures.

Definite changes have also been made in the planning of the activity of service enterprises. Instead of the 13 indicators, which were previously established centrally, only the volume of sales of personal services with the elimination from it of the services paid for by the population and the services rendered to residents of the countryside is planned. Stable long-term standards on the distribution of the profit and the formation of the wage fund and incentive fund have been specified for enterprises. On the basis of the established indicators and standards the labor collectives independently draft the plans of economic and social development. The appropriate superior organizations, on the basis of these plans, should supply personal service with the necessary material resources.

One of the most important problems of the experiment being conducted is the creation of the necessary standard base. The main, central part of this problem, just as of the problem of improving the economic mechanism as a whole, consists in the assurance of the stability of the planning standards. In case of stable standards greater interest in the improvement of economic activity appears among the collectives of enterprises.

The work on the stabilization of standards is now being carried out in several directions. Under the conditions of the experiment the standards are being determined not with respect to the total production volume or other gross indicators, but with respect to the indicators of growth. The further increase of the fund for the remuneration of labor and other resources, which are allocated to the enterprise, should be started with the corresponding improvement of the indicators of production activity.

The standards are calculated during the preplanning period, and not on the basis of the indicators of the plan being approved, but mainly on the basis of

the analysis of the factors of production efficiency. In other words, the standards act not as a function of the plan. The need to change the standards in case of the revision of the plan thereby disappears. It is also of no small importance that the standards are established only with respect to one or two fund-forming indicators. This simplifies the system of the creation of incentive funds and makes it more comprehensible to the personnel of the works.

Substantial changes are occurring in the system of the stimulation of the increase of labor productivity and the achievement of the best end results of production. As applied to the basic cost accounting unit, the production association (enterprise), the main attention is being devoted to the strengthening of the connection of the wage fund with the results of the work of labor collectives, which signifies the transition to the standardized formation of this fund. The point of this procedure is that the enterprises would know in advance what changes will occur in the amounts of the wage subject to the change of the volumes of output being produced, the improvement of its quality and conformity to the planned assortment. At the enterprises, for example, of the electrical equipment industry, light industry of Belorussia and local industry of Lithuania the wage fund is formed from two amounts--the base fund and its increment, which is formed in case of an increase of the production volumes. It is important to check and develop this and other advanced methods.

The procedure of forming the material incentive fund has been changed. Its amount is determined by the achieved improvement of the indicator of production efficiency. In particular, it is envisaged to increase the material incentive funds for the decrease of the product cost or the increase of the profit. The attention to the quality of the output being produced has been increased. In the sectors, which produce consumer goods, the deductions for these funds have been made dependent on the indicators of the proportion of products, which enjoy the increased demand of the population, and products of the highest quality. The liability for the failure to make deliveries in accordance with contracts is increasing significantly: for each percent of nonfulfillment the material incentive fund is decreased by 3 percent. This is more than at the enterprises which are not participating in the experiment. The measure is strict, but justified.

The importance of the fund for sociocultural measures and housing construction has been increased. It is stipulated that for all enterprises the increase of this fund is determined according to a uniform norm: for each percent increase of labor productivity it is increased by 2 percent. Starting in 1985 it is planned to increase this standard on the basis of gained experience.

A new bonus system is being checked by the experiment. The executives and workers of the management staff receive a bonus only if the contracts on the delivery of products have been fulfilled. If the assignment on the increase of labor productivity is not fulfilled, they receive only part of the bonus. Experience shows that such a bonus system increases the interest in the timely delivery of items in accordance with contracts, in the increase of labor productivity and in the decrease of the expenditures on production.



A new procedure of distributing the profit has been introduced, its role in the production and social development of labor collectives has been increased. The system, which has been introduced in services, is of the greatest interest. The profit, which has been derived by the enterprise (with the exception of that part of it, which in accordance with stable standards is sent to the state budget and superior organizations), is left at its disposal. The collectives themselves decide how to dispose of the earned assets: what amount to allocate for production construction, the renovation of the enterprise and social needs.

Several new forms of the organization and remuneration of the labor of workers, engineering and technical personnel and employees have been introduced and forms, which have justified themselves, are being used for increasing the interest of the labor collectives of service enterprises. In particular, it is planned to disseminate more extensively the brigade forms with work on a single order and remuneration in accordance with the end result. The contractual forms of remuneration are being developed.

Service enterprises are permitted by means of the saving of the wage fund to establish increments on the wage rates of workers and the salaries of engineering and technical personnel and employees. Taking into account the specific nature of such enterprises (the existence of a large number of separate clothing repair and tailoring shops, workshops and receiving centers), it is envisaged that the shop personnel will be paid bonuses by means of the saving of the wage fund. The executives of enterprises and the management personnel receive bonuses from the incentive fund, which has been formed at the expense of the profit. Such a procedure is called upon to increase the interest of every engineering and technical worker and employee in increasing the amount of services paid for by the population, since the amount of the profit also depends on this.

A subject of special attention in the experimental system is the increase of the interest and responsibility of labor collectives in the practical use of the achievements of science and technology. Their opportunities with respect to the use of assets for the recovery of the expenditures connected with the introduction of innovations have been broadened. In particular, enterprises can independently dispose of a portion of the assets of the unified fund for the development of science and technology.

The compensation of enterprises for losses in the remuneration of labor, which stem from the temporary worsening of the economic indicators during the period of the mass assimilation of new equipment, is also envisaged. The centralized and reserve funds of ministries serve as the source of such compensation.

A set of measures on the improvement of the material stimulation of managerial, engineering and technical personnel for concern about technical progress at the enterprise is being checked. Thus, the payment to them of one-time bonuses (in excess of the established maximum amounts of bonus payments) for the development and output of products, which in quality correspond to world models or exceed them and meet the long-term requirements of consumers, is permitted. The executives of scientific research, design, planning and technological organizations and the ministries of heavy and

transport machine building, as well as the electrical equipment industry have been granted the right to pay bonuses to specialists for the development and output of competitive products (in excess of the bonuses envisaged by the prevailing statutes). Machine building ministries can allocate assets for the payment of bonuses to the workers of enterprises of other ministries for the early and high quality performance of contractual operations on the development, assimilation and introduction of new equipment. Owing to this an increase of the interest of related enterprises and sectors in the solution of urgent problems of technical progress is being achieved. At the same time increased material liability for the nonfulfillment of the plans and assignments on the development and assimilation of new equipment and advanced materials and the introduction of modern technology and advanced know-how has been established.

The rights of the enterprises of the ministries of heavy and transport machine building and the electrical equipment industry in the approval of wholesale prices for semifinished products, assemblies and parts of intradepartmental consumption and for test batches (prototypes) of items, as well as in the establishment of supplementary payments to the wholesale prices or price reductions in consultation with the client have been broadened for the purpose of the more effective solution of the problems of technical development. It is also no less important that the appropriate materials resources, and first of all equipment, are being allocated with the same rights as centralized capital investments for the performance of operations at the expense of assets of the production development fund (which should become the basic source of assets for retooling).

The increase of the responsibility of labor collectives for the fulfillment of the plans and assignments on the development of science and technology will to a significant extent also promote the acceleration of scientific and technical progress in the national economy. Now the corresponding indicators have been included among the most important ones, in accordance with which they also evaluate the economic activity of enterprises, as well as tally the results of socialist competition.

The measures on the broadening of the rights and the increase of the responsibility of labor collectives, which are being implemented at the enterprises which are operating under the conditions of the experiment, are having a positive effect on the results of their activity. The results of the first half of 1984 testify that definite changes have occurred at the enterprises of all five ministries. The closer connection of interest and responsibility has changed noticeably the atmosphere in labor collectives. The development of production has begun to be planned more carefully, the attention to the coordination of production processes with supply and marketing operations has been increased. Perceptible changes have occurred in the making of deliveries in accordance with contracts. With respect to the volume of product sales with allowance made for the obligations on deliveries in the Belorussian Ministry of Light Industry, the Ukrainian Ministry of the Food Industry and the Lithuanian Ministry of Local Industry the plan was completely fulfilled. In the Ministry of Heavy and Transport Machine Building and the Ministry of the Electrical Equipment Industry they came close to the fulfillment of the plan (respectively 99.5 and 99 percent).

At the majority of enterprises material and manpower resources are now being used better, product quality is increasing more rapidly. The achieved increase of labor productivity attracts attention. At the enterprises of the electrical equipment industry it came to 7.2 percent, in the food industry of the Ukraine--6 percent. In all the ministries, in which the experiment is being conducted, the growth rate of labor productivity is higher than for industry as a whole.

A change in the output of products of the highest quality category has been noted for the national economy as a whole. The successes of the ministries, in which the experiment is being conducted, are noticeably greater than the average level. Thus, for the Ministry of the Electrical Equipment Industry the proportion of the products of the highest quality category came to nearly 50 percent, while for all industry it came to a little more than 16 percent. The rate of increase of products of the highest quality category in industry came to 0.7 percent, while for the Ministry of Heavy and Transport Machine Building--2 percent, the Ministry of the Electrical Equipment Industry--1.6 percent, the Ukrainian Ministry of the Food Industry--3.2 percent and the Belorussian Ministry of Light Industry--2 percent.

The indicators, which were achieved at the majority of enterprises on the decrease of the product cost as well, are also reassuring. In the machine building ministries, which are participating in the experiment, the rate of decrease of the product cost is 2.5-fold greater than on the average in industry. The results are also rather good at the enterprises of the food industry of the Ukraine and light industry of Belorussia. The large amount of organizing work of party, trade union and Komsomol organizations and economic organs on the mobilization of the working people for the accomplishment of the tasks of the experiment, on the identification and use of production reserves and on the increase of the efficiency of management lies behind all these successes.

There are many well-operating enterprises. And each such labor collective has something to learn, something to adopt. Take if only the Kharkov Electrical Equipment Plant. When starting the experiment, the collective of the enterprise streamlined process planning. This is a complex task, but its accomplishment yields an appreciable result. The existence of a properly developed system of such planning makes it possible to organize the work of the entire collective according to a single comprehensive schedule of the production of items and to coordinate the schedule of the production and delivery of parts and assembly units with it.

At the Eletrotyazhmash Plant they also began with the revision of intraplant production planning. Moreover, here they reorganized and strengthened the marketing department, drafted and introduced a statute on the procedure of the accounting and evaluation of contractual obligations on deliveries of products and linked it with the system of material stimulation. At the Neringa Production Association of Cultural Goods a detailed plan of organizational and technical measures, the implementation of which should speed up the rate of the updating of items with allowance made for the orders of trade, was drafted during the period of preparation for the experiment. One of the main

directions of this plan is the retooling of production by means of noncentralized sources of financing and credit. They began renovation with the tool shop, on which very much in the prompt changeover of production for the output of new products depends.

During the experiment it was discovered that the labor collectives had begun to treat with great interest the formation of brigades of a new type. Now the enterprises and their party organizations are concerned not simply about the "coverage" by the brigade form of the largest possible number of workers, but are devoting the maximum attention to the creation of the prerequisites of the formation of truly viable collectives and to the provision of favorable conditions for their work, particularly the introduction of internal cost accounting. And this is yielding definite results: the number of cost accounting brigades is increasing under the conditions of the experiment at a faster pace than at enterprises which have not changed over to the new conditions of management.

For example, a comprehensive goal program of the development of brigade forms of the organization and remuneration of labor has been adopted at the Ukrelektromash Association. Here 354 brigades, which encompass more than 70 percent of the total number of workers, have already been set up. About 90 percent of these brigades are working on a single order with remuneration according to the end result.

At the Neringa Association 70 percent of the workers have joined in the brigade form of the organization and stimulation of labor. This had a positive effect not only on the production indicators, especially the increase of labor productivity, but also on other aspects of the activity of the collective of the association. In particular, on the initiative of the workers themselves the output norms were increased, the number of violations of labor and technological discipline decreased by nearly one-half.

The first half a year of work under the conditions of the experiment not only revealed positive trends in the economic activity of labor collectives, but also posed a number of problems. There are still many unresolved questions in the area of the decrease of the expenditures on production and the improvement of the use of production resources. The analysis of the first results shows that much work lies ahead in these directions. We would like to dwell here on the questions connected with technical progress.

It has now become obvious that it is necessary to continue the search for ways and measures of the acceleration of technical progress at enterprises. Of course, changes in the technical modernization of enterprises, which are in any way significant, were also not expected in such a short time. For all the enterprises, which began to work under the conditions of the experiment, already had plans of technical development, which had been coordinated with material and technical supply, contracting organizations and so on. A change of the situation in this area is a question of time. It can tentatively be asserted that starting in 1985 the production development fund "will begin to work" properly. Now in connection with the fact that for the present the assets of this fund are obviously insufficient, the enterprises cannot fully exercise the rights which have been granted to them here.

Preliminary calculations show that in the future it will be necessary to increase the production development fund by twofold or more. Then a large portion of the assets for the retooling of enterprises will be covered by means of its assets, which will make it possible to assign to labor collectives real cost accounting responsibility for technical progress at the works.

The gained experience has shown that the procedure of forming the production development fund also requires refinement. Obviously, this fund should be linked to a greater extent than now with the end results. In this way, it seems, it will be possible to find the optimum combination between the sources of the formation of the fund in question.

At the enterprises, which are operating under the conditions of the experiment, the question of responsibility for the increase of the technical level of the output being produced has become very urgent. The essence of the problem is to place the enterprises, which produce technically advanced items, under more advantageous conditions and at the same time to put pressure economically on the labor collectives which produce obsolete products.

A solution of this problem has been found. It is envisaged by the decree of the CPSU Central Committee and the USSR Council of Ministers "On Measures on the Acceleration of Scientific and Technical Progress in the National Economy" to certify all the output being produced by enterprises according to two categories: the highest (which corresponds to the world level) and the first. Price markups are established for products of the highest quality category. Uncertified products are sold at a reduced (by nearly one-third) price. Thus, the enterprises, which produce technically obsolete products, find themselves in an obviously worse situation. Unfortunately, this decree is being implemented slowly. The formed situation can be explained in part by the labor intensity of the work on product certification, but the main reason is the inaction of many economic managers.

Many urgent, still incompletely solved problems are connected with the increase of the stimulation of the more complete use of productive capital. In the press it has already been repeatedly noted that this aspect in the economic activity of enterprises is affected by the experiment to a smaller extent than other aspects of the economy of enterprises. This problem has to be solved, of course, subject to the specific nature of the sector and specific enterprise. In machine building at this stage of the experiment, it seems, it is necessary to increase the attention to the questions of reducing the reserves of commodity stocks to the set standards. A tendency for such reserves to increase has now begun to be traced. Taking into account the possibility of the emergence of such a situation, the ministries, which are working under the conditions of the experiment, have been granted the right to collect a fee from enterprises for above-standard reserves of commodity stocks. However, as experience shows, the organs of management of the sectors so far have not properly used this sanction. Therefore a number of additional measures, particularly on the increase of the role of financial levers, are being outlined.

It is understandable that the measures being checked experimentally are not being implemented by themselves. Economic managers, party and soviet organs and trade union and Komsomol organizations are called upon to exert the utmost efforts on their introduction and to perform constant explanatory and educational work. There is no need to say that the set of measures, which is being implemented, is of great economic and political importance. This is one of the main directions of the improvement of the management of the economy and the improvement of the management mechanism, the style and methods of management and a necessary condition of the increase of the labor and social activeness of the working people. Hence there also follows the need for the thorough study and explanation of the basic provisions of the experiment being conducted. And in this the role of propagandists and the entire system of party education is invaluable.

The party organization and the administration of the Novocherkassk Electric Locomotive Building Plant exerted much effort in order to report to every worker and specialist everything new that the experiment is yielding in the economic activity of the enterprise. Before the start of the experiment the party committee and the administration of the plant drafted plans of organizational and ideological measures for the preparation and conducting of the experiment. Special lessons were conducted with the secretaries of the party buros and the ideological aktiv. A united political day, at which the executives of the plant, the chief specialists and workers of the economic service spoke, was devoted to the explanation of the new principles of management. Special programs of the instruction of the members of the collective were elaborated and implemented. The coordination of all the work and the monitoring of the activity of the different services were assigned to the established special commission headed by the director. Leading specialists, leaders and innovators of production were members of it.

The active work of the commissions of party organizations for the monitoring of the activity of the administration is of great importance for the successful passing of the preparatory period and for the implementation of the experiment itself. In particular, at the Novocherkassk Electric Locomotive Building Plant a commission for the monitoring of the activity of the administration in the area of the improvement of management was formed by a decision of the party committee. The activity of the commissions for the monitoring of the use and saving of material and energy resources, as well as for questions of retooling is aimed at new, more complicated tasks.

The conducting of the experiment is a continuation of the complex and multifaceted work on the improvement of the economic mechanism. Along with the practical checking of the measures, which are envisaged in the experiment, favorable opportunities are also appearing to improve other aspects of management; to improve pricing, to elaborate a more advanced system of wage rates and salaries of workers and specialists, to optimize the structure of the management of the national economy. Owing to this a new step will be taken in the creation of an economic mechanism which is equal to the economy of mature socialist society.

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## INVESTMENT, PRICES, BUDGET AND FINANCE

### ECONOMISTS DISCUSS FACTORS LEADING TO BETTER CAPITAL YIELDS

Moscow EKONOMICHESKAYA GAZETA in Russian No 38, Sep 84 p 11

[Article by V. Krasovskiy, doctor of economic sciences and L. Fridman, candidate of economic sciences, under rubric "Economic Mechanism of Intensification": "Return on Investment: Growth Factors"]

[Text] The fixed production assets of all the branches in the national economy have exceeded 1.4 trillion rubles, constituting 44 percent of our country's national wealth and the basis of its economic might. The volume of fixed production assets is increasing rapidly. Their increase on the average per year came to 81.2 billion rubles in 1981-1982 and 90.2 billion rubles in 1983.

However, the use of the potential of the production assets has been insufficient in recent years. For example, whereas in 1981-1983 the production assets of all branches of the national economy increased by 22 percent, the gross social production increased by 11 percent and the national income increased by 12 percent. The stabilization and, in the future, the increase in the return on investment will become one of the basic directions in the work of deepening the processes of intensification.

#### Objective and Subjective Factors

The drop in the return on investment is leading to a situation in which some of the increase in the national income that is obtained as a result of the increase in labor productivity must be channeled into new construction in order to compensate for the reduced return on investment. Certain economists feel that the reduction in return on investment and the increase in the capital-intensity of production represent a phenomenon that is not so unfavorable, since it is paid for by a saving in the production costs. However, the existing data refutes this idea. According to computations made by Academician T. S. Khachaturov, for example, the period of time required for new fixed assets to pay for themselves in the 10th Five-Year Plan reached 25 years, which exceeds by several times the norms that are used when determining the effectiveness of capital investments.

Sometimes doubt is cast upon the theoretical substantiation of the indicator of return on investment, in which there is allegedly an ignoring of the role

played by live labor, and substantiation is provided for the objective inevitability of the decrease in return on investment. Here one can recall the instruction given by K. Marx to the effect that, with the progress of science and technology, the old machines, instruments, and apparatuses are replaced by new, more effective ones, which, as compared to the amounts of their work, are cheaper (Vol 23, p 619).

Consequently, it is completely natural to have the outstripping growth of the physical volume of output as compared with the value of the means of labor, rather than a reduction in return on investment. Inasmuch as the replacement of manual labor by machine labor constitutes the content of technical progress in situations of machine production, the indicator of return on investment characterizes an essential aspect of the increase in the effectiveness of production. At the same time it is not correct to contrast it to the productivity of live labor, considering the inseparable unity of live and embodied labor in the process of production.

Therefore it is theoretically unjustified to see in technical progress the reason for the inevitable decrease in return on investment. Its observed decrease attests to the insufficient use of the capabilities of technical progress, especially the highly effective achievements of science and technology.

The reduction in return on investment is sometimes justified by the assertion that there has been an increase in the expenditures to protect the environment and to use the natural resources, and deposits in remote parts of the country have been brought into operation. Actually, one cannot deny the importance of that factor. But its influence is not decisive and it is far from identical. The shift of the extractive industry to the east, where there is a higher level of assets-intensity in production, of course, does exert its effect, but in the total volume of investments the investments in projects in Siberia and the Far East constitute no more than 16-17 percent. As for the ecological expenditures, their share in the overall volume of capital investments will scarcely exceed 1.5 percent during the five-year period.

The most important factor in the reduction of return on investment is, in our opinion, the reduction in the work load placed upon the existing capacities and fixed assets, as well as the insufficient renovation of assets on a modern technical basis. The increase in the coefficient of shift operation of the equipment, the reduction in equipment idle time, and the increase in productivity remain a critical task for all links in the national economy. Here, as in the use of the achievements of scientific-technical progress, much depends upon the initiative and responsibility of the economic managers, specialists, and workers. Examples of advanced production collectives convincingly attest to the growing significance of the subjective, "human" factor in the development of modern production.

For example, at construction projects in the West Siberian Petroleum and Gas Complex, use was made of the method of constructing compressor and pumping stations by the complete-block method, which made it possible to reduce the volumes of construction-and-installation operations by 40 percent, to reduce the periods of time required for construction by a factor of 2-3, to reduce



the estimated cost by 20 percent, and to have a corresponding increase in return on investment. Another example: The machine-builders of the Izhorskiy Zavod Association, using rolled metal with increased durability and improved technological schemes for welding and mechanical processing, were able to manufacture a nuclear reactor with double the capacity without increasing its dimensions or cost.

### Technical Re-equipping

The extent of removal of obsolete and relatively unproductive equipment for the basic branches of the national economy does not exceed 1.3-2 percent a year, which is approximately one-half the necessary figure. Obsolete equipment is repaired repeatedly and then restored on an old technical basis. For example, the 1100 roughing mill at the Kuznetsk Metallurgical Combine was repaired 38 times during its service life, and the cost of the repairs exceeded the initial cost by a factor of 1.9.

In investment policy, a factor that takes on primary importance is the mass replacement of relatively unproductive equipment. At a meeting with the workers of the Serp i Molot Plant in Moscow, K. U. Chernenko pointed out that special importance at the present-day stage is attached to the technical re-equipping of the branches, the introduction of the latest achievements of science and advanced experience. This, he emphasized, is a persistent demand of the time -- one might even say the command of the era.

The machine-building industry is increasing the output of new technology. Whereas during the 10th Five-Year Plan an annual average of 2700 new types of machinery, instruments, and means of automation were assimilated into production and their series production was begun, during the years of the 11th Five-Year Plan that indicator constitutes 2800-2900. However, the new technology is not reaching the existing production sufficiently.

The basis of the policy in the area of the increase in the production capacities during the next few years and in the long-term view, as is noted in the decree of the CPSU Central Committee and the USSR Council of Ministers, entitled "Improving the Planning, Organization, and Administration of Capital Construction," must be the remodeling and technical re-equipping of the existing enterprises on the basis of the introduction of new highly-effective technological processes and equipment. For the 12th Five-Year Plan it will be necessary to develop plans for the remodeling and technical re-equipping of the existing enterprises, as well as a composite plan for the carrying out of those operations by the individual branches.

The increase in the return on investment will be promoted by the approval for the next five-year plan, for the individual branches, of coefficients for the shift operation of the equipment and norms for the annual equipment work fund, and quotas for the use of the existing production capacities.

### Problems of Modernization

The reduction of the cost of output in the branches of the assets-creating complex is a very important factor for the favorable dynamics of return on

investment and all the indicators of effectiveness. The new technological processes make it possible for the assets-creating branches to achieve a sharp decrease in the weight and cost of the industrial buildings. It is precisely this progressive technological scheme that was used in the construction of the Krasnoyarsk Excavator Plant and of Atommash. A lightened alternative for making a roof out of shaped sheet with a light-weight heat filler weighs only 40 kilograms per square meter, whereas one made out of reinforced concrete weighs 300 kilograms. The "lightened" technological scheme is simultaneously less expensive and faster. In housing construction, instead of reinforced concrete in panel-type building construction it is desirable to use three-layer panels made of thin slabs with a light-weight heat filler. In this instance the weight is reduced to one-thirtieth of the usual weight.

The resolution of the tasks of increasing the return on investment is also linked with the improvement of the practice of price determination for means of labor, and primarily for new technology. The wholesale prices of machinery, equipment, and instruments include incentive increases that are considered as part of the proposed economic benefit when they are used in the branches of the national economy.

But the computed effect, as a rule, is not achieved in the real-life conditions of operating the new machines and, according to our research, constitutes as a rule no more than 44 percent of the amount of the incentive increase. Thus, the new output of machine building frequently leads to a reduction in the return on investment and to a reduction in the profit for the users of the new technology.

The effect was also felt of the shortcomings of the existing methodology for determining the economic effectiveness of the use in the national economy of new technology and efficiency-improvement suggestions. At the present time the USSR Academy of Sciences' Scientific Council for the Effectiveness of Capital Investments, Fixed Assets, and New Technology has prepared a draft version of a new methodology for determining the economic effectiveness of applying new technology in the national economy.

The technical re-equipping of the enterprises can now rely upon the results of the certification of the work stations in the production associations and at the enterprises of industry, which certification must become systematic.

Incomplete use is being made for these purposes of the capabilities of the efficient organization of the capital repair of equipment. The number of workers at repair services is greater than the number of workers in the corresponding branches of machine-building, sometimes by a factor of 2-3. The use of capital repair for the restoration of the old parameters of the existing machinery, apparatuses, transportation means, and other technology leads, as a rule, not to an increase, but rather to a decrease, in their effectiveness. A different situation can be created if the capital repair is combined with modernization and the raising of the technical level of the assets.

It would seem to be desirable to develop the sphere of service at the plant itself in the appropriate branches of machine-building. With repair at the

plant it is much simpler to resolve the tasks of modernizing the existing technology and its progressive renovation, and its principles can be used in the activities of a powerful and well-equipped repair service in such branches as power engineering, transportation, and certain repair enterprises in ferrous metallurgy.

The technical re-equipping of production and the increasing of the efficiency of the production infrastructure make it possible, consequently, to resolve the tasks both of increasing the return on investment and the more effective use of the labor resources.

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## INVESTMENT, PRICES, BUDGET AND FINANCE

### UNION REPUBLICS MUST SEEK WAYS TO INCREASE BUDGET REVENUES

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[Article by M. V. Vasil'yeva: "Certain Aspects of Improvement of the Revenue Base of Local Budgets"]

[Text] The party and state have been shown constant concern about enhancing the role of local soviets in performing the tasks of economic and social and cultural construction. The decisions of the April (1984) Plenum of the CPSU Central Committee, the speech delivered at the plenum by Comrade K. U. Chernenko, general secretary of the CPSU Central Committee, provide vivid evidence of this. The decree adopted by the plenum "On Further Work of Soviets of People's Deputies" has outlined measures aimed at further enhancement of the role of soviets of people's deputies in carrying out the CPSU's socioeconomic policy.

In recent years the party and state have made a consistent effort to develop and bolster the material and financial base of local soviets. This ensures more favorable conditions for the combined economic and social development of the republics, krays, oblasts, okrugs, rayons and cities and contributes to performing the task of raising the efficiency of social production in the interests of a further rise in the prosperity of the Soviet people.

As the role of soviets of people's deputies is enhanced, there is a simultaneous growth of the importance of local budgets, which now represent a steady and stable financial base for consistently carrying out the party's socioeconomic program at the local level and for a further rise in the material and cultural standard of living of the Soviet people.

The stability of local finances has been achieved gradually, over several stages. In the postwar period the size of local budgets on the basis of expenditures has grown constantly in connection with the steady expansion of socioeconomic measures carried out by the party and state in the interests of increasing the prosperity of the Soviet people. At the same time the revenue base of local budgets has undergone substantial changes: the floating of state loans by public subscription was terminated and the tax rates on the wages of workers and employees and on the income of kolkhozes were reduced. A number of changes followed from the organizational restructuring of administration, from improvement of the forms and methods for collecting budget

revenues (elimination of the machine-tractor stations and producer cooperatives, abolishing the tax on structures and land rent collected from state enterprises, and so on).

Thus a substantial growth of expenditures on the one hand and reduction of the revenue base of local budgets on the other have made it more complicated to balance those budgets. This problem has been especially acute in many rayon, village and settlement soviets. As a consequence the number of subsidized budgets increased sharply up to 1966 in RSFSR, KaSSR, MSSR and a number of other union republics, and the sum total of subsidies allocated from higher budgets also increased. In recent years the extent to which local budgets were subsidized has continued to increase. In 1968 about 1,500 budgets of rural rayons, or half of the country's rayons, and more than 14,000 village and settlement budgets, or 32 percent of their total, were receiving a subsidy. The number of subsidized budgets was especially large in KaSSR, GSSR, KiSSR, ArSSR, AzSSR, TuSSR and LiSSR.

Measures were taken under those conditions which made it possible to stabilize the level of subsidization and then even to guarantee its planned reduction. A large role was played by adoption of union and republic legislative acts aimed at further improvement of the activity of village, settlement, rayon and city soviets of people's deputies, at expanding their rights and obligations in the domain of economic and cultural construction, and at strengthening their material and financial base. The governments of the union republics and soviets of people's deputies made a considerable effort in that direction. Finance ministries and local financial authorities took an active part in seeking out opportunities for strengthening and expanding the revenue base of local budgets and also in improving the methods of regulating them.

In the late sixties and early seventies the enterprises of local industry, consumer services for the public, municipal services and utilities, trade, and so on were transferred to the jurisdiction of rayon, city, settlement and village soviets of people's deputies. As a result payments from the profit of enterprises under local jurisdiction increased 3.1 billion rubles between 1968 and 1977 and amounted to 7.6 billion rubles, but their share in the revenues of local budgets remained at approximately the same level.

This effort has continued in recent years. For example, in RSFSR, MSSR and TuSSR a number of associations and enterprises which were previously under republic jurisdiction have been transferred to the jurisdiction of local soviets of people's deputies. In UkSSR more than 90 percent of the enterprises and organizations of Minbyt [Ministry of Consumer Services for the Public] and Minzhilkomkhov [Ministry of Housing and Municipal Services] and more than 80 percent of those of Minmestprom [Ministry of Local Industry], Mintorg [Ministry of Trade] and Goskomizdat [State Committee for Publishing] were under the jurisdiction of local soviets in 1982. All of this has had a positive effect toward increasing the revenues of local budgets. Payments from the profit of enterprises and organizations under local jurisdiction reached 9.2 billion rubles in the country as a whole according to the report for 1982.

The next important measure to strengthen the revenue base of local budgets was the 1969 establishment of additional deductions of the turnover tax applied to the retail sales of consumer cooperative organizations which were paid into the budgets of rural rayons (and subsequently transferred to the budgets of village and settlement soviets). By 1975 these deductions already amounted to nearly 2.9 billion rubles. In 1982 the sum total of additional revenues to local budgets from this source of income had increased to 3.9 billion rubles, including 2.8 billion rubles to rayon budgets and 1 billion rubles to village and settlement budgets.

The influence of the coordinating and monitoring functions of local soviets toward increasing the operating efficiency of associations, enterprises and organizations located in their jurisdiction was strengthened. Measures have been under way to further expand the relations of local budgets with associations and enterprises under higher jurisdiction.

Pursuant to the legislation in effect a portion of the profit of enterprises and economic organizations under republic (union republic) jurisdiction may be credited to local budgets. In UkSSR, for example, a number of deductions from payments from profit of enterprises subordinate to 12 republic ministries and departments (Minchermet [Ministry of Ferrous Metallurgy], Minlegprom [Ministry of Light Industry], Minpishcheprom [Ministry of Food Industry], etc.) were converted in 1983 to differentiated levels of deductions from payments from profit. When enterprises in highway transportation are taken into account, the sum total of payments from profit of enterprises and organizations under republic jurisdiction into local budgets amounted to 1.6 billion rubles, or about 20 percent of their revenues. A portion of payments from the profit of enterprises and economic organizations has also been transferred to local budgets in UzSSR, KaSSR, GSSR, AzSSR, MSSR, LaSSR, KiSSR, TaSSR, ArSSR and TuSSR. The sum total of all these deductions in the country as a whole was 2 billion rubles in 1983.

Pursuant to Decree No 292 of the CPSU Central Committee, the Presidium of the USSR Supreme Soviet and the USSR Council of Ministers, dated 19 March 1981 and entitled "On Further Enhancement of the Role of Soviets of People's Deputies in Economic Construction," beginning in 1982 50 percent of deductions from the charge for water taken from water management systems by industrial enterprises at all levels of subordination was transferred to local budgets. This meant an annual diversion of about 250 million rubles from that source to local budgets.

A decision was made at the same time to credit to local budgets a portion of the additional profit (in the amount of 10 percent) obtained by enterprises under union and republic (union republic) jurisdiction from the sale of highly effective new products for productive and technical purposes and products bearing the state Quality Emblem. At present these proceeds are not large (about 5 million rubles in 1983), but as local soviets exert greater influence toward improved performance of enterprises under republic and union jurisdiction, we assume that their total will increase.

The right of local soviets provided for in legislation to keep for their own disposition revenues additionally obtained in fulfillment of the budgets as well as amounts by which revenues exceed expenditures and which are formed in budgets at the end of the year because of overfulfillment of revenues or saving on expenditures, has quite an important role in expanding the financial capabilities of local soviets. Every year local soviets in the country as a whole possess on the order of 2-2.5 billion rubles of such funds which can be spent to develop the local economy and to carry out social welfare and cultural programs.

All of these measures have substantially strengthened the revenue base of local budgets. At the present time their subsidization has been almost entirely eliminated. In BSSR, GSSR, MSSR, KiSSR, TaSSR and ESSR there are no subsidized budgets at all at the present time. Subsidies are received only by individual rayons in the Far North of RSFSR, high mountain rayons of KaSSR, TuSSR and ArSSR, and also by certain cities and settlements (mainly of the health resort type) of LiSSR. In 1983 subsidies were received by only 232 out of 51,550 local budgets, or 0.5 percent of the total number, and 168 of these were village and settlement budgets.

All of this provides evidence that the present system of budget regulation is effective and efficient. The stability of the revenue base of local budgets is guaranteed with the help of the assigned revenues and deductions from all-union state taxes and revenues, and that is in turn the basis for the uninterrupted financing of all programs envisaged by the plan and the budget.

At the same time, in the light of the decisions of the 26th Party congress and subsequent plenums of the CPSU Central Committee local budgets face crucial new tasks in carrying out socioeconomic programs of the party. The present stage of communist construction is characterized by the simultaneous performance of a number of comprehensive target programs: the USSR Food Program and the Comprehensive Program for Development of the Production of Consumer Goods and the System of Services for the Public. At the same time a broad-scale reform of general public education is under way, and housing, social welfare and cultural facilities and consumer service facilities are being built at a faster pace. Comrade K. U. Chernenko, general secretary of the CPSU Central Committee, pointed out in his speech to the voters of the Kuybyshev Election District in Moscow that in the present complicated international situation "even under these conditions we have not omitted to think about the development of social welfare programs. After all, the ultimate goal of everything we do is to improve the life of the Soviet people."

To a considerable extent these major state tasks in the domain of social progress will be carried out by soviets of people's deputies at the local level. Their financial base--the local budgets--is accordingly in need of further improvement and strengthening. To be specific, thorough study should be made of the question of strengthening and expanding the revenue base of rayon budgets in connection with making them responsible for furnishing 3.3 billion rubles of financing for planned outlays of kolkhozes to be financed in accordance with the decisions of the May (1982) Plenum of the CPSU Central Committee from the resources of the state budget.

The additional expenditures amount to almost 7 percent of the volume of local budgets for 1983 (47.3 billion rubles), but 28.2 percent of the volume of rayon budgets (11.7 billion rubles), while this proportion is 42.4 percent in RSFSR and 34.7 percent in UkSSR. Under present conditions expenditures from rayon budgets are financed above all by increasing the size of deductions to these budgets from all-union state taxes and revenues as well as by allocating earmarked funds from higher-level budgets. That is why the task has to be performed of expanding the revenues assigned to local budgets.

In our opinion further study should be done on the question of additional inflow of amounts of the turnover tax depending on retail sales of consumer co-operative organizations. These proceeds play a definite role in strengthening the revenue base of local budgets, but at the same time this source of revenues occupies a high share of the budgets of rural rayons and village soviets in certain union republics. For example, in certain rayons of GSSR the additional amounts of the turnover tax have reached 65-80 percent, in MSSR 55-65 percent, and in ArSSR 60-70 percent. It is obvious that the high dependence of the budgets on a single source of revenues is hardly economically sound.

We will examine the sensible ways of broadening the financial capabilities of local budgets. One of them, in our view, is to increase payments from the profit of enterprises and organizations under local jurisdiction. These revenues have been growing year after year in absolute amounts. Whereas in 1968 they totaled 4.6 billion rubles, in 1982 they had risen to 9.2 billion rubles. However, in spite of the absolute growth of these payments, their share in the revenues of local budgets has been growing slowly (19.3 percent in 1968 and 20.1 percent in 1982).<sup>\*</sup> In order to increase the inflow of payments from profit into local budgets, the effort has to be carried on more vigorously to transfer from the republic level those associations and enterprises whose products and services are used predominantly to meet the needs of the local population and also enterprises under kray and oblast jurisdiction according to where they are located, i.e., to the jurisdiction of ispolkoms of rayon and city soviets. This will increase the motivation of soviets of people's deputies to increase the operating efficiency of associations and enterprises and consequently it will promote the growth of revenues of local budgets by virtue of an increased inflow of payments from profit.

Attention should also be paid to the question of transferring to lower budgets payments from profit of enterprises under kray and oblast jurisdiction located on the territory of city and rayon soviets of people's deputies. We might refer to the example of Moscow Oblast, where since 1982 100 percent of payments have been made into city and rayon budgets by all enterprises and organizations under oblast jurisdiction which are part of the administration of Mosoblelektro [Moscow Oblast Administration for Operation of the Electric Power System], industrial enterprises employing invalids and those manufacturing durable consumer goods, housewares and household chemical products, as well as those which are part of the administration for repair and construction of roads and social amenities. There are 88 such enterprises, and the sum total of their payments

<sup>\*</sup> Not including funds obtained from republic budgets through mutual settlement.



in 1984 amounted to 61.9 million rubles. The transfer of these payments has broadened the revenue base of the budgets of cities and rayons in the oblast by an average of 11 percent (the aggregate size of the budgets in 1984 was 556.9 million rubles).

Even though the transfer of payments from the profit of enterprises under kray and oblast jurisdiction to lower-level budgets has been provided for in legislation, until now it has not been widely applied. Yet such opportunities do in our opinion exist. For example, according to report data for 1982, the inflow of payments from profit into republic, ASSR, kray and oblast budgets by enterprises under their jurisdiction was 2.2 billion rubles. If only 30 percent of these payments by enterprises under oblast jurisdiction were transferred to city and rayon budgets, the revenues of those budgets would increase by approximately 600-700 million rubles. This would make it possible, first, to broaden the revenue base of these budgets, and second, to strengthen the impact of ispolkoms of city and rayon soviets on the operating results of enterprises under oblast jurisdiction located on their territory.

A separate examination should be made of the question of expanding the present practice of passing on to local budgets a portion of the payments from profit of enterprises under republic jurisdiction. In the country as a whole they have been growing, and in 1983 amounted to slightly more than 2 billion rubles, but UkSSR accounts for the major share (1.6 billion rubles). Moreover, in RSFSR, BSSR, LiSSR and ESSR payments from profit of enterprises under republic jurisdiction are not passed on to local budgets at all.

The experience in using these payments to regulate local budgets has been demonstrating its many constructive aspects. To be specific, local soviets have become more interested in the results of the financial and economic activity of enterprises, local budgets are being strengthened, the participation of republic enterprises in shaping the social and economic infrastructure is guaranteed, and local government agencies have a stronger influence on the process of social production.

With this in mind it is advisable to make broader use of the possibilities for transferring a portion of payments from profit of enterprises and economic organizations under republic jurisdiction to local budgets, above all those producing consumer goods or providing services to meet the needs of the population.

Further improvement of the procedure for building up local budgets in the direction of making the size of their revenues more dependent upon improvement of the operating efficiency of enterprises located on the territory of the respective soviets and involved in meeting the needs of the public deserves the most steady attention in our view.

One of the possible sources for expansion of the revenue base of local budgets, in our opinion, might be additional inflow of the turnover tax as a function of retail sales of enterprises in the state trade system (by analogy with the procedure established previously for consumer cooperative organizations). There is experience with this in AzSSR, TaSSR, ESSR and LaSSR. For

example, in 1984 LaSSR called for transfer to the budget of the city of Ventspils of 3 percent additional amounts of turnover tax on the basis of retail sales of organizations in the state trade system, or 1.7 million rubles, which is 16 percent of the revenues of the city's budget. This made it possible to balance the budget's revenues and expenditures. At the same time local government authorities become economically interested in fulfillment of the retail sales plan.

Or another example. In the city of Kaliningrad in Moscow Oblast there are settlement soviets--Pervomayskiy and Tekstil'shchiki. Their budgets for 1984 amounted to 538,900 rubles and 184,800 rubles, respectively; their own sources of revenues amounted to 83,700 rubles (15.5 percent) and 38,700 rubles (21 percent); and transfers from all-union state taxes and revenues amounted to 455,200 rubles (84.5 percent) and 146,100 rubles (79 percent), within which the personal income tax comprises the largest share of the total amount of budget revenues--434,400 rubles (80.6 percent) and 139,200 rubles (75.3 percent), respectively. The sales of organizations in the state trade system in 1983 were 8,612,500 rubles and 4,841,600 rubles, for the respective village soviets. If additional amounts of turnover tax based on the volume of retail sales of organizations in the state trade system are transferred to those settlement budgets, it would be possible to make their revenues directly dependent upon the performance of trade organizations and also to reduce the relative share of revenues based on transfers from personal income taxes. Especially since on the territory of these settlement soviets there are no payers of the turnover tax into those budgets, and payments from profit of organizations in the state trade system are paid into the oblast budget.

In our view practical application of this kind of procedure for budget regulation would specifically help to improve the formation of budgets of cities under rayon jurisdiction and settlements of the urban type within which there are no payers of the turnover tax or where their number is negligible, and it would also give local soviets a greater motivation to improve the performance of state trade organizations.

We will go on to examine the next possible direction. The procedure in effect calls for transfers to be made to local budgets from the turnover tax originating on the territory of the local soviet in the proportions established for each of them when the higher-level budget is approved. Proposals are outstanding to the effect that an exemption should be made for the enterprises of local industry, consumer services to the public and consumer cooperatives and that the entire amount (100 percent) of the turnover tax of these enterprises should be credited to the revenues of local budgets. This would undoubtedly help to increase the interest of local bodies of government in the fullest possible use of untapped potential at enterprises for increasing the volume of production, for lowering production cost, for adhering to an economy regime, and it would strengthen the dependence of the size of revenues of local budgets on the operating efficiency of enterprises.

But it should be borne in mind in connection with a final solution of the problem that when the entire amount of the turnover tax is transferred, a surplus of revenues could be created in a number of budgets of cities and rayons.

For example, the size of the budget in the city of Shchelkovo in Moscow Oblast was 14.7 million rubles for 1983, the sum total of its own revenues was 5.7 million rubles, transfers from all-union state taxes and revenues was 9 million rubles, including 4.2 million rubles of the turnover tax (6.4 percent of the total collection). Out of the total collection of turnover tax (65 million rubles) enterprises of local industry, consumer services to the public and consumer cooperatives paid 8.9 million rubles. If all the payments of these payers of the turnover tax were credited to the budget of the city and the present size of transfers from the personal income tax and other all-union state taxes and revenues necessary to regulate lower-level budgets were retained, the sum total of revenues of the budget would come to 19.7 million rubles and would exceed the volume of expenditures by approximately 5 million rubles. The calculations we have made showed that when 100 percent of the turnover tax is passed on, a surplus of revenues would also be created in the budgets of the city of Vidnoye in Moscow Oblast and the Babushkinskiy, Sokolnicheskiy and Moskvoretskiy Rayons in the city of Moscow. In view of this it would be advisable to establish that in the case of major enterprises in local industry, consumer services for the public and consumer cooperatives paying sizable amounts of turnover tax, a portion of that tax would be credited to the higher-level budget (republic, oblast).

A number of proposals come down to increasing the size of transfers to the local budgets from the turnover tax collected on the sale of goods produced in accordance with supplemental targets assigned by local soviets. This proposal deserves attention. The point is that according to the present procedure such transfers are made in the proportion established when the local budget is approved from the total collection of the turnover tax, and these proportions vary from 0.5 to 100 percent. Oblasts, krays, cities and rayons overfulfilling the plan for the turnover tax by equal amounts obtain unequal transfers from above-plan collections of this revenue, which is not conducive to increasing the motivation of local government authorities to fulfill additional targets.

In this case, in our opinion, uniform transfers from the turnover tax collected over and above that established in the plan should be established for local budgets on the basis of the specific conditions and peculiarities in the union republics, but they would retain the right to differentiate among the various types of budgets. The reason for this is that as a rule many large payers of the turnover tax are concentrated in large cities, and as a consequence the collection of that tax is sizable. Passing on to such budgets above-plan amounts of the turnover tax, for example, in the proportion of 50 percent, would be inadvisable, since in a number of cases it could result in their obtaining large amounts of additional revenues, which would hardly be justified. For example, in the budget of the city of Ivanteyevka in Moscow Oblast, where the size of the transfers from the turnover tax is 1.9 percent, the city's budget in 1982 received 131,000 rubles of above-plan revenues, and if it were credited 50 percent of the above-plan collection of the turnover tax, the additional revenues would amount to 3.3 billion rubles, or 83 percent of the total size of the budget.

One of the potential ways of strengthening the resource base of local budgets would be transfers from profit on various types of state insurance (except for insurance on the property of kolkhozes and sovkhozes). Transfers from mandatory insurance of the property of individuals, voluntary insurance of structures, household goods, vehicles and animals have become most widespread in the union republics. Transfers from voluntary insurance of the property of cooperative and other organizations and accident insurance are practiced less frequently, and transfers from life insurance exist in only two republics (LiSSR and TuSSR). We should note that transfers from the total collections of premiums under mandatory insurance of the property of individuals are established as a rule to benefit village and settlement budgets, since the recordkeeping of those payments is done by individual village and settlement soviets. Transfers from premiums paid on other types of insurance are credited to the revenues of rayon and city budgets.

Use of this system of transfers from insurance premiums enhances the motivation of local soviets to develop state insurance, and it helps to strengthen the revenue base of local budgets. Experience shows that where transfers are made from insurance premiums to local budgets voluntary insurance develops considerably better, and the collection of mandatory insurance premiums on the property of individuals is also organized.

In RSFSR the experience in passing on to local budgets a part of the deductions from profit in state insurance operations has been in place since 1963. In the seventies such transfers began to be made in the other union republics except for LaSSR and ESSR, where they have not yet been introduced. Over the period 1976-1980 the sum total of transfers in the country as a whole amounted to 1,721.6 million rubles, and in the 3 years so far of the 11th Five-Year Plan (as planned for 1983) they have been 1,265.3 million rubles.

An analysis of the available figures indicates that in spite of the results achieved, in a number of union republics opportunities for expanding the revenue base of local budgets through transfers from insurance premiums have by no means been fully utilized. That is the situation in UkSSR, MSSR, TaSSR and certain other union republics. In our view drawing more fully on insurance premiums as a source for strengthening the revenue base of local budgets would also enhance the motivation of local bodies of government to develop state insurance further and consequently to improve service to the public.

In our opinion implementation of these proposals would help to strengthen the dependence of the size of revenues of local budgets on the operating results of enterprises and organizations located on the territory of local soviets and on that basis would contribute to strengthening their revenue base.

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## RESOURCE UTILIZATION AND SUPPLY

### GOSSNAB TRIES TO COORDINATE SUPPLY WITH ECONOMIC EXPERIMENT

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[Article by L. Minakin, chief of the South Urals Main Territorial Administration of the USSR State Committee for Material and Technical Supply (Chelyabinsk): "Implementing the Economic Experiment"]

[Text] A meeting of the working group of USSR Gosnab [State Committee for Material and Technical Supply] for the coordination of the work connected with the conducting of the economic experiment, to which the executives of many large enterprises of the Ministry of the Electrical Equipment Industry and the Ministry of Heavy and Transport Machine Building of our economic region were invited, was held. They told about the new conditions and the arising difficulties and posed questions which are connected with the improvement of material and technical supply.

Suddenly there was excitement in the hall. One of the speakers, the deputy director of a large plant, stated that the possibility exists to decrease significantly the weight of the output being produced. It is a question only of how they will treat this in the ministry.

This incident clearly showed that far from all the experiment participants are using the extensive rights which have been granted to them. One still has occasion to encounter the timidity of economic managers and the reluctance to assume responsibility when solving arising problems. But enterprise and boldness, which are even accompanied by a certain risk, are the most important conditions of work under the new conditions.

Frequently we also come across negative phenomena of a different kind. Many enterprises are posing questions about the allocation "for the experiment" of groundlessly large amounts of material and technical resources. And if these orders are not met, they send letters and telegrams to all instances. Considerable efforts are required to decrease the number of such appeals. In recent times many problems have been examined and solved locally.

Today it is possible to note with satisfaction that as compared with past years the supply of enterprises with material and technical resources has been improved significantly. The activity of the working group for the conducting of the economic experiment, which was set up in the main territorial

administration, contributed to a considerable extent to this. At its meetings the questions of material and technical supply are regularly examined, the needs for resources are specified and the possibilities of the replacement of some types of products with other, less scarce types are coordinated.

The working group constantly examines the problems of making out schedule orders, analyzes operational data on the making of deliveries of products and settles urgent questions of resource supply. In short, it is doing everything necessary for the improvement of the supply of the experiment participants with raw materials, materials and components. It has become a rule to hear weekly at strategy conferences in the main territorial administration the reports of executives of subordinate administrations on the state of the supply of the enterprises, which are participating in the economic experiment, with material and technical resources. At the beginning of the year the main territorial administration jointly with the representatives of enterprises, the South Urals Railroad and motor transport organizations examined many unresolved questions of the supply of the enterprises, which are located in Chelyabinsk and Orenburg oblasts, with cars and containers.

In accordance with the requests of ministries and enterprises material resources are being delivered ahead of time and, in necessary instances, as an advance toward future assets. The suggestions of the experiment participants on the making of an exchange of individual types of raw materials, materials and items are also examined promptly. As a result we were able to solve many difficult problems, which had a positive effect on the results of the activity of the enterprises which are operating under the new conditions.

Last year the plants and associations of the Ministry of Heavy and Transport Machine Building fulfilled the plan of product sales by 99.7 percent, while with allowance made for contractual obligations--by 91.1 percent. For the enterprises of the Ministry of the Electrical Equipment Industry these indicators came to 99.4 and 96.2 percent. During the first quarter of this year the Ministry of Heavy and Transport Machine Building fulfilled the plan of the sale of industrial products by more than 101 percent, while in conformity with contractual obligations--by 99.9 percent. The corresponding indicators of the plants and associations of the Ministry of the Electrical Equipment Industry are 102.7 and 98.3 percent. The absolute majority of enterprises coped in full with the fulfillment of the obligations on deliveries.

However, for the present there are no grounds to count on stable work. Many unresolved questions, which are checking the progress of the economic experiment, remain. Irregularities still exist in the supply of enterprises with raw materials, materials, semifinished products, metal products, stampings, wires, cars and containers. There are many complaints about the shortage of fuel and lubricants.

The Kyshtym Machine Building Plant imeni M. I. Kalinin is experiencing serious difficulties due to incomplete supply in accordance with the allocated assets with bearings of several types by the 4th State Bearing Plant (Kuybyshev) and the 14th State Bearing Plant (Prokopyevsk). The enterprises of Yaroslavl, Vladimir and Novaya Kakhovka are poorly supplying electric motors of various

makes to the Kyshtym enterprise. The Asha Illumination Engineering Plant is not fulfilling the plan of deliveries due to the fact that it cannot obtain brass tubing. So far Soyuzglavtsvetmet has not attached the Miassselektroapparat Electrical Equipment Plant in accordance with the allocated assets for rolled aluminum products.

Unfortunately, there are many such examples. Joint vigorous efforts of the all-union main administrations of supply and marketing, the territorial administrations and the plants themselves are needed for overcoming these shortcomings.

While devoting much attention to the material and technical supply of the enterprises which are participants in the experiment, we are also not losing sight of the economical and efficient use of resources. The work on the identification and commitment to the economic turnover of above-standard surpluses has been stepped up. Nearly 500,000 rubles of them had been accumulated at the Asha Illumination Engineering Plant. The assets for these types of products were reduced for the enterprise by the same amount. A large amount of above-standard and unused materials, which were detected at other enterprises, was committed to the economic turnover.

The main territorial administration is devoting much attention to the checking of the availability of technical specifications and to the conclusion of contracts for the delivery of products by the enterprises which are participating in the economic experiment. We established that this work had not been performed everywhere on the set date. At the Troitsk Diesel Plant the preparation of production was not carried out completely due to the fact that the Leningrad Zvezda Production Association upset the delivery of many descriptions of blanks. A similar situation also formed at the Elektropreobrazovatel' Production Association, which needs the urgent assistance of the Ministry of the Electrical Equipment Industry.

Spot checks showed that many enterprises had dragged out the work on the conclusion of contracts for the delivery of products. Thus, the Uralelektromotor Plant had not drawn up the obligations on the sale of a fourth of the items which were planned for production.

Under the conditions of the economic experiment being conducted the decrease of the rates of consumption of materials and fuel and energy resources is of particular importance. For enterprises are now more interested than before in the maximum increase of the output of products with the minimum expenditures of materials. The evaluations of the work of industry, which previously existed, were revised, and the managers of enterprises, who use such an effective level as long-range economic standards, have the opportunity to derive significant profits.

There is, obviously, no need to stress how important it is to decrease the consumption of material and technical resources. But it should be said that the impact of this work in many ways depends on the reporting to every enterprise of the corresponding assignments. The ministries should do this in the set time and should strictly monitor the progress of the fulfillment of what has been planned. Practical experience has shown that when proper

attention is not devoted to this work or it is performed formally, one cannot count on high results.

It must be admitted that the Ministry of the Electrical Equipment Industry and the Ministry of Heavy and Transport Machine Building set assignments on the decrease of the rates of consumption of materials and fuel and energy resources for all the subordinate enterprises located in our economic region. The production associations and plants in turn outlined measures which ensure their fulfillment. But, unfortunately, not everyone treated this important matter with the proper responsibility. Thus, the Uralelektromotor Electrical Equipment Plant received the assignment to save 4 percent of the rolled ferrous metal products which had been allocated to it. But it elaborated measures which make it possible to save only 3 percent of the metal.

The changeover of the enterprises of the Ministry of the Electrical Equipment Industry and the Ministry of Heavy and Transport Machine Building to work under the new conditions required the use of advanced forms of material and technical supply. The main territorial administration carefully studied and analyzed the suggestions of the experiment participants in order to consolidate and develop the methods of the organization of work, which had justified themselves, and to overcome the bottlenecks. Thus, when making out schedule orders for products we did everything possible to preserve the direct long-term economic ties. As a result this year there were only a few instances when the plants protested their attachment to other enterprises which supply bearings, wires, polyethylene for food and plywood. The main territorial administration appealed to the all-union main administrations of supply and marketing, and they took steps on the elimination of the severed ties.

The questions of the centralized delivery of products to enterprises, which are distant from Chelyabinsk and Orenburg enterprises with respect to deliveries over considerable distances, are being coordinated. In the near future all the participants in the economic experiment without exception will be changed over to the new form of service.

The main territorial administration is devoting much attention to the improvement of the organization of the shipment of products from the supply enterprises to the consumers who receive them in nontransit quantities. Much work has been done on drawing up the orders again for the purpose of shipment to our enterprises. All the products, which are intended for the participants in the economic experiment, are now being accumulated at the warehouses of the territorial organ. However, the fact that plants ship products to enterprises for deliveries last of all, while the reserves we have do not always make it possible to carry out the sorting out of the necessary assortment of items and materials, is seriously hindering the final settlement of this question.

In conformity with the Procedural Instructions, which were approved by USSR Gosplan, the main administration examines monthly the questions of the delivery of materials to every enterprise which is participating in the experiment. The work on drawing up again the supply authorizations with the distinctive inscription "Experiment" has been completed. The commodity shipping documents are also accompanied by it. All the supply authorizations



for the delivery of products to the experiment participants have been taken under strict control. Shipment in accordance with transit orders is checked by our operations and traffic control department.

The previously concluded long-term contracts for material and technical supply have been revised for the purpose of improving the supply of the enterprises which have been changed over to the experiment. The amounts of services on the preparation of materials for consumption in production have been increased. Our main territorial administration sent to all the enterprises, which are working under the new conditions, letters with the request to express their wishes with respect to the improvement and the increase of additional services. The received materials have been carefully analyzed, while the suggestions, which are of practical interest, are being implemented.

The questions of the improvement of material and technical supply, which the enterprises of the Ministry of Heavy and Transport Machine Building submitted, have been studied. The timely issuing by the all-union main administrations of supply and marketing of specified orders for the production of equipment for specific consumers for the purpose of the timely preparation of production is of particular importance for them. Taking into account the lengthy cycle of the making of metallurgical equipment and its custom production, the plants requested that the carryover reserves of material resources be increased. This will make it possible to ensure smooth, continuous operation, therefore we met the wishes of the plants half way.

Other suggestions of the experiment participants, which are connected, in particular, with the improvement of the supply of consumers who are large distances from enterprises with respect to deliveries of products, were also examined. At present a significant portion of the resources for such plants is being sent to Chelyabinsk and Orenburg. The main territorial administration considered it expedient to set up intermediate warehouse bases in Buzuluk and Zlatoust in order to facilitate the centralized delivery of materials. But the assistance of USSR Gosstnab is necessary for the implementation of this idea. For example, the allocation of an additional amount of motor transport, first of all small-tonnage motor transport, will be required. In this case it would not be necessary to create at enterprises of the region additional warehouse areas for the storage of material resources.

It seems that the time has come to take steps for the creation of reserves of individual types of scarce products. We came to this conclusion as a result of the repeated discussion of this question jointly with the enterprises which are participants in the economic experiment and are located in the region. The gained experience of guaranteed comprehensive supply indicates the need for the transfer of the reserves, which are available at the plants of the Ministry of the Electrical Equipment Industry and the Ministry of Heavy and Transport Machine Building, to enterprises for deliveries of products of the territorial organ, as well as the number of workers and the wage fund. Such a redistribution of reserves would make it possible to shift resources promptly and to eliminate in good time the arising shortage of materials.

USSR Gosstnab is devoting much attention to the needs and concerns of the enterprises, which are participants in the economic experiment and are located

in our economic region. All the suggestions are studied carefully, timely decisions are made on the questions being posed. The working group has examined the questions of the improvement of the organization of the material and technical supply of the enterprises of the Ministry of Heavy and Transport Machine Building and the Ministry of the Electrical Equipment Industry, which are served by our main territorial administration. Effective steps have been taken on practically each suggestion expressed by the meeting participants. But much also depends on the ministries. We are hoping, in particular, for a positive settlement of the question which USSR Gosplan posed for the Ministry of Heavy and Transport Machine Building. It is a question of the establishment at the South Urals Machine Building Plant of a metal base for the regional supply of consumers, at first of all the plants of its own sector. This would make it possible to accumulate nondecreasing reserves of individual types of items for production engineering purposes at the enterprises for deliveries of the main territorial administration by means of the redistributed reserves of the fund holders.

The economic experiment is a serious examination for the enterprises, which are working under the new conditions, and for the organs of material and technical supply. There are many difficulties, but they are surmountable. For this it is extremely important to learn to think in the new way and to reorganize radically one's work and one's attitude toward the matter.

The economic experiment is being figuratively called "fighting reconnaissance." During the 12th Five-Year Plan the entire national economy should operate under the new conditions. Consequently, the enterprises of the Ministry of the Electrical Equipment Industry and the Ministry of Heavy and Transport Machine Building and supply organs, which today are in front of everyone, have a special responsibility. We understand this well and are constantly striving to increase the responsibility for the effective implementation of the large-scale experiment.

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## REGIONAL DEVELOPMENT

### SIBERIA, FAR EAST DEVELOPMENT PLANS DISCUSSED

#### Yenisey, Lower Angara Region

Moscow PRAVDA in Russian 30 May 84 p 2

[Article by A. Mukoyed, authorized agent of USSR Gosplan for the East Siberian Economic Region, Krasnoyarsk: "Storerooms of the Lower Angara: Complete Development for the Eastern Regions"]

[Text] The lower current of the Angara and the Middle Yenisey have attracted attention to themselves since time immemorial because of the wealth of the Siberian taiga and hydroelectrical power resources, the deposits of mineral raw materials, and the healthful climate. However, the remoteness from the Trans-Siberian Railroad Mainline, the poorly maintained roads, and the poor level of geological study hampered the intensive -- and, more importantly, the comprehensive -- development here of any branches other than the woodworking ones.

During the past approximately 10 years the situation has changed. As a result of the search carried out by Krasnoyarsk geologists, major mineral resources have been prospected in the Angara area. They include lead and zinc, manganese and iron ores, and reserves of magnesites, talc, bauxites, nephelines, and casting sand. The area to the north of the Angara is promising with regard to gas. Prospecting operations have already been carried out for the industrial operation of the large-scale Sobinskoye deposit of natural gas, and the Yurubchenskoye and Omorinskoye gas-condensate deposits. The region has a concentration of approximately 3 billion cubic meters of mature and overmature forests, on the basis of which it would be possible to create new large-scale lumber-industry complexes.

Within the confines of the future Lower Angara Territorial-Production Complex, the long-term plan provides for the construction of four hydroelectric power stations -- the Sredneyeniseyskaya and Osinovskaya GES on the Yenisey, and the Boguchanskaya and Nizhneangarskaya on the Angara. On the basis of inexpensive electrical energy it is planned to create many energy-intensive production entities, which it is planned to concentrate in the Lesosibirskiy, Kodinskiy, Motyginskiy, Boguchanskiy, and Yartsevskiy industrial centers.

It is planned to build a number of large-scale projects here, including the Gorevskiy Mining and Concentration Combine, the East Siberian Ferroalloys Plant, the Yeniseyskiy Woodpulp and Paper Combine, the Lesosibirskiy Plywood Plant, and the Maklakov-Yeniseyskiy Yeast-Hydrolysis Plant.

The Sredneyeniseyskaya GES will become the energy heart of the large-scale Lesosibirskiy Industrial Center. The location of the GES has been selected on the Yenisey River, slightly below the point where the Angara enters it. Accepting into the reservoirs the water flows from the two rivers, regulated by the Krasnoyarskiy, Sayano-Shumenskiy, and other hydroelectrical centers, the GES will be a reliable source of inexpensive electrical energy.

The East Siberian Ferroalloys Plant is being located close to the Sredneyeniseyskaya GES. Originally it was planned to bring the manganese ore that it required from a distance of thousands of kilometers -- from Nikopol. However, as geologists have confirmed, within the next five-year period it will be possible to obtain ore from the nearby Porozhinskoye manganese deposit, and somewhat later, concentrate also. All this makes especially effective the work of the plant with its orientation on the production of the ferromanganese that the metallurgical industry needs for the production of cold-resistant steel grades.

The creation in the Lesosibirskiy Industrial Center of a woodpulp and paper combine and a hydrolysis plant will provide the opportunity for processing millions of cubic meters of timber waste products, which are currently being burned up -- at best in the furnaces of boiler rooms but more frequently in campfires at the timber camps. Somewhat to the south of the city of Lesosibirsk, in the area of the new Abalakovskaya site, it is planned to build a mineral fertilizers plant.

Another important region that is part of the Lower Angara Territorial-Production Complex is the Kodinskiy Industrial Center, which is being formed on the basis of the electrical energy from the Boguchanskaya GES that is under construction. The industrial center is typified by the wealth of timber resources, and deposits of iron ore and bauxites. Majors reserves of natural gases have been prospected in the regions that are adjacent on the north.

Plans are also being considered for locating industrial enterprises in the remaining three industrial centers in the area of the Lower Angara. But in order for them to become a reality, it is necessary right now to resolve a number of complicated problems. And the one that is the principal one among them is the transportation problem.

In conformity with the studies carried out by the scientific centers of USSR Gosplan and RSFSR Gosplan and the Siberian Branch of the USSR Academy of Sciences, it would be desirable in the long run to consider the construction of a North Siberian Railroad Mainline. The need for this mainline will increase sharply after the mighty coal pits of the KATEK [Kans-Achinsk Fuel-Energy Complex] go into operation, the new deposits of mineral raw materials have been assimilated, and dozens of large-scale enterprises being built in the East Siberian Economic Region are activated. All this will require the

railroad to take on additional freight shipments totaling many tens of millions of tons. In other words the complex needs a reliable transportation system.

For this purpose it is necessary to build two roadways, which will become, in essence, the first sectors of the North Siberian Mainline. Many ministries must have a self-interest in them. They will be of special interest for the USSR Ministry of Nonferrous Metallurgy. One can scarcely consider to be correct the scheme that is currently being planned by the ministry -- the seasonal shipping out of the ore by water. That alternative will require the construction of special piers, and the organizing of freight transshipment to the railroad. In a word, this will require considerable capital expenditures, and especially will require considerable annual transportation expenditures.

Evidently it would be economically justified to consider the alternative of building a funicular railroad over the narrowed bed of the Angara, putting the ore on the right bank into railroad cars on a sector of the North Siberian Mainline. Then the freight shipments could move along it without any additional expensive transshipments.

The exit to the right bank of the Angara, to the rich forest areas, is also very important for the development of the wood-processing enterprises. This is the location of the largest raw-materials base of Roskolkhozstroyob'yedineniye, for which a good road will open up paths for shipping lumber to the unforested parts of the country.

An important link in the development of the Lower Angara Territorial-Production Complex and its industrial centers is the creation of the capacities of the contract organizations and bases in the construction industry. Thus, the construction of the Sredneyeniseyskaya GES is oriented toward the collective of KrasnoyarskGESstroy, which will create by 1986 the construction of the Sayano-Shumenskaya and Maynskaya GES's. However, even now the USSR Ministry of Power and Electrification should begin more actively to create the planned regional base for the hydroelectrical construction workers, so that the collective can change over in a planned manner to the new site and transfer the machinery and equipment there.

At the present time, at the construction site for the Buguchanskaya GES, work is being performed at full swing in the foundation pits of the basic structures, and the spanning of the Angara is coming closer. That means that the time has come to determine how the first phase of the Kodinskiy Industrial Center will look, in practicality, in the 12th Five-Year Plan, and where which enterprises will appear. Such preparatory work is also required by other industrial centers in the complex, as well as the submerged zone of the Sredneyeniseyskaya GES, and therefore it is necessary to begin that work without delay.

The first steps that have already been taken in this direction indicate the great extent to which all the questions of forming the complex are interconnected and interdependent, and how important it is to resolve them by the united efforts of the interested ministries and departments. It is precisely during the formation of the schemes for the territorial-industrial

complexes that the interests of the branch and of the territory come into conflict and are reduced to a common denominator, with that common denominator being the comprehensive use of the natural resources; the creation of production entities without any waste products, of an efficient everyday-living infrastructure, and well-equipped cities and workers settlements; and the carrying out of measures to protect the environment. At such time each territorial-industrial complex must have a scientific basis for its development, in the form of a scheme.

At the present time the Council for Studying the Productive Forces, under USSR Gosplan, is working on the scheme for the formation of the Lower Angara Territorial-Production Complex. That scheme will reflect the studies carried out by the TsENII [Central Scientific-Research Institute of Economics], under RSFDSR Gosplan, as well as the schemes for the development of branches in the national economy which were prepared by the union ministries and departments. We hope that all of them will take a self-interested attitude toward the questions of creating this territorial-production complex. The basic factor at such time is the taking of an objective approach to evaluating their immediate participation in adjusting the unified production and social-everyday infrastructure of the territorial-production complex and industrial centers, especially in allocating shared funds for the first-priority transportation assimilation of the region. What is necessary here is an approach not only from the point of view of today's needs, but also for the longer period of time, taking into consideration the fact that the expenditures that are made now will subsequently have a large effect in the national economy.

#### Baykal-Amur Mainline

Moscow SOVETSKAYA ROSSIYA in Russian 5 Jul 84 p 2

[Article by V. Chichkanov, corresponding member of the USSR Academy of Sciences, director of the Institute of Economic Research, Khabarovsk, under rubric "Baykal-Amur Mainline: Problems of Assimilation": "Taking the Wealth of the Taiga Land"]

[Text] It is well known that the BAM [Baykal-Amur Mainline] is not only a new mainline. It is also a new stage in the development of the economy of our country's eastern regions. One can already see growing up alongside the road large-scale inhabited places for timber workers, miners, and hydroelectric construction workers. They are becoming the base points for the broad assimilation of the natural wealth in the mainline zone.

The Far Eastern geologists have drawn up a map showing the mineral wealth in the Eastern part of the BAM. That map is literally filled with all kinds of conventional symbols. More than 20 different types of mineral raw materials have been found here. The iron-ore deposits are especially numerous -- there are about a hundred of them, with total geological reserves of more than 60 billion tons, as well as deposits of stone and brown coal, the reserves of which are estimated to be 64 billion tons. The area has large quantities of nonferrous and noble metals, phosphate raw materials, and building materials. And it is as though Mother Nature herself was concerned about the convenience

of their complete assimilation, and so she situated most of the deposits like "bouquets" close to the mainline.

On our planet it is a rare thing to encounter such an unusual combination of mineral resources as has been prospected in Southern Yakutia, especially for the creation of a base for nonferrous metallurgy. The Aldan gold-bearing province is also situated here.

The Selpgdarskoye apatites deposit is an extremely large one with regard to reserves and has the highest content of phosphorus pentoxide. Each of the deposits in the Kholdomi Valley in the mining Komsomol'skiy Rayon represents an entire galaxy of valuable minerals -- tin, copper, lead, zinc, tungsten, bismuth, molybdenum, etc. And from the point of view of the scope, for example, of the prospected tin in the region and the region's geological prospects, the region is on a par with the most important deposits in the world. Right next to it, geologists recently discovered yet another deposit of tin -- the Badzhal'skoye deposit. The rails of the BAM run along its northern border. This considerably facilitates the access to the underground storerooms.

The complete study of the resources in the environs of the BAM is, essentially speaking, only beginning, inasmuch as there previously had not existed any realistic prospects for their industrial development. The taiga village of Ust-Nyukzha, since the mainline has arrived here, is turning into a major populated point. Very large deposits of iron ore have been prospected nearby. In the long view it may be possible, on its basis, to create a large-scale metallurgical production entity.

In the near future the BAM will open the path to the wealth in yet another important Far Eastern region -- the area near the Sea of Okhotsk, to which, as yet, there are no reliable or permanent transportation approaches. Reserves of iron ore have also been found here, as well as phosphorites, nonferrous metals, mined chemical raw materials, semiprecious stones, and stone for trim.

The words of a certain song say that for every person here, there are a hundred thousand trees. I shall not take it upon myself to judge the accuracy of that estimate, but the area that is adjacent to the mainline is truly a boundless ocean of taiga. The Eastern sector of the BAM alone accounts for one-fifth of all the timber resources of the Soviet Union. That comes to 4 billion cubic meters of timber. Of that, more than half is coniferous species, that is, the most valuable species of trees.

Our institute has already prepared a comprehensive program for the assimilation of the Eastern part of the BAM for the long-term period until the year 2000. In the most general form, its purpose can be formulated as follows: the creation of a new industrial zone in the Far East. In particular, it is planned to increase by 35 million tons the production of stone coal, by building new mines and pits; to create a major metallurgical base with a complete technological cycle; and to establish 14 additional large-scale timber enterprises.

Increased interest in the natural wealth of the BAM is being shown by foreign countries, primarily the countries in the Pacific Ocean basin, which are known on the international market as major consumers of minerals and timber commodities. Already the territory that is adjacent to the mainline provides for a considerable amount of the exported logs, technological chips, solid fuel. . . The completion of the construction of the mainline will open up broader opportunities for the participation of the Far Eastern economy in the foreign-economic ties of the Soviet Union. Speaking figuratively, the steel strands of the mainline, like outstretched arms, will carry the region's natural wealth to the ports on the shore of the Pacific Ocean.

For Japan, the United States, Canada, and certain other countries, the BAM represents great importance as a convenient and profitable path for shipping large-capacity containers over the territory of the USSR to Europe, and then back again. By concluding an agreement concerning shipments over that mainline, those countries will reduce by several days the amount of time required to deliver their cargo shipments and will receive a substantial benefit in costs as compared with ocean-going freight.

The construction of the BAM has not yet been finished, but it has already begun to pay for itself. In the Eastern part of the mainline, 20 timber enterprises are already in operation. A powerful woodpulp and cardboard combine is located here, and the coal pits are producing more than 4 million tons of fuel. The existing sectors of the mainline have already carried more than 30 million tons of freight.

We have been convinced that the BAM area has a great future. However, for the successful assimilation of that region it is necessary to resolve certain urgent problems. As is generally known, it is planned to create territorial-production complexes (TPK) and industrial centers here. Seven such structural units are supposed to be created in the Eastern sector of the BAM. Scientists will have to develop the long-term directions for the development of the territorial-production complexes and prepare a scheme for supply of electricity to this zone. Among the total set of questions to be resolved, the ones that probably occupy the most important place are those pertaining to the geological and economical estimates of the resources of minerals and raw materials, and the substantiation of the methods of producing and concentrating. Because the mining industry is one of the most labor-intensive branches. Special attention must be devoted to reducing the losses of mineral resources that remain in the bowels of the earth or that are thrown on the dump heaps. It is important to use not only the ores, but also the associated minerals. The assimilation of the regions adjacent to the mainline would be inconceivable without the creation of a construction complex. But its appearance, in turn, must be preceded by the resolution of many urgent tasks. They include the development and introduction of technology produced in versions suitable for use in the north, the share of which technology is still very small here. It is important to refrain from simply copying the schemes that have been developed for the more assimilated regions of the country; the construction processes must be carried out with the largest possible degree of industrialization and the application of prefabricated, plant-produced structural elements.

The economic assimilation of the Eastern zone of the BAM depends largely upon the availability of the needed number of working hands. But where can they be



found? The permanent population here is extremely small. Consequently, it is necessary right now to begin urgently to resolve the questions of attracting and assigning qualified specialists: to build good-quality, comfortable housing, to create a well-extended network of personal services and cultural enterprises. It is also necessary to strive for a situation in which all of this is at a quality level that is higher than that in the well-settled parts of the country.

Obviously, when the new mainline is activated, many of the transportation questions will be removed from the agenda. Nevertheless the creation of permanent highways along the mainline will remain one of the most vital tasks. It is well known that a considerable amount of the freight in the northern regions is conveyed by trucks. At the present time, the roads that are being used for this purpose are unimproved and temporary winter roads, which speed up the wear and tear of the vehicles by a factor of 3-5.

When resolving the large-scale economic problems, we must also remember to protect the environment in this region. The territory through which the mainline runs is, ecologically speaking, very vulnerable. When choosing the technological processes, it is necessary to evaluate them first of all from that point of view. Practical life shows us that it is more profitable to spend funds not to combat the consequences of the pollution of the environment, but rather to invest them in the development of new, ecologically clean technological processes.

I would like to direct attention to yet another important circumstance. When assimilating new territories it is necessary to think a bit about how to avoid the disproportion that arose in the Far East between the development of the branches and the development of the region's economy as a whole. Every branch attempts to concentrate within itself everything that it needs -- from repair shops to the production of electrical energy. Unfortunately, this tendency can also be noted on the BAM. . .

Recently I happened to make another visit to the Eastern sector of the mainline. It is already carrying ore, timber, and coal. Much has been produced in the regions that are adjacent to the road. But this is only the beginning. The consistent and economical resolution of the tasks that have been mentioned here will make it possible to use more effectively all the opportunities of this promising region.

#### Chichkanov Interview

Moscow PRAVDA in Russian 11 Aug 84 p 3

[Interview conducted by PRAVDA correspondent V. Khatuntsev, Khabarovsk: "The Potential of the Future: Complete Development for the Eastern Regions"]

[Text] The All-Union Conference on Scientific Practice, entitled "The Development and Placement of the Productive Forces and Transportation Support of the Far Eastern Economic Region for the Period Until 2000-2005" has taken place in Khabarovsk. The conference organizers were the Far Eastern Scientific Center of the USSR Academy of

Sciences, and, in particular, the Institute of Economic Research, USSR Academy of Sciences. The following is an interview conducted by a PRAVDA correspondent with that institute's director, Corresponding Member of USSR Academy of Sciences V. P. Chichkanov.

[Question] The conference participants, to a large extent, developed and refined the principles stated in the "Far East" comprehensive program for economic development, which has been planned for the long-term period. Valeriy Petrovich, could you please tell us what its goals are?

[Answer] The Far Eastern Economic Region occupies a special place on our country's economic map. Its specialization has been largely determined by its natural and geographical position. Nonferrous metallurgy, the fishing industry, the timber industry, and other branches have at their disposal here capacities that are of importance to the entire country.

The development of the "Far East" comprehensive target program, on which many scientific institutions and planning agencies have been at work, is aimed at creating the optimal economic structure in the region, the substantial increase in the effectiveness of production, and the complete improvement of the working and everyday living conditions for the Far Easterners. The program is concrete and is applicable to the region's krais and oblasts. It also ties the development of the economy into a single complex. You will agree that it is difficult to subdivide, for example, the fishing industry on a territorial basis. Although the plans and the reference points for the future have been completely "tied in" with the shores of Kamchatka and Maritime Kray.

[Question] When you mentioned fishing, were you speaking about the region's leading branch?

[Answer] One of the leading ones, but not the main one. The region's raw-materials base makes it possible to increase the production and processing of very valuable metals, for which industry is still experiencing a tangible shortage. There are large prospected deposits, but their assimilation requires nontraditional, more technological methods. In the ores being extracted, certain associated minerals surpass in value the basic elements. But the metallurgists have not yet begun to extract everything of value. For example, the Solnechnyy Mining and Concentration Combine requires a chemical-metallurgical production entity, the expenditures for which, according to our computations, will pay for themselves fourfold during the five-year plan. However, USSR Ministry of Nonferrous Metallurgy is moving slowly and half-heartedly to improve the technology of extracting the associated elements.

It is very unprofitable for the Far Easterners to carry out currently only the primary processing of ores, with the concentrates going to the metallurgical combines in the Urals and Central Asia. Scientists of the DVNTs [Far Eastern Scientific Center] have tested cyclone whirlwind units that can be used to equip plants for the processing of concentrates. And the enterprises themselves with relatively small capital-intensity could be constructed close to the mining and concentration centers. In a word, all the prerequisites exist for intensifying within the near future the role of the Far East in the

nationwide division of labor, particularly in the leading branch of specialization in the region -- nonferrous metallurgy.

[Question] Does that mean that the tremendous transportation costs for the shipping of raw materials and other output are not inevitable?

[Answer] Reducing them -- and, consequently, achieving the efficient placement of the productive forces -- is axiomatic. A large amount of metal output is shipped to the Far East. And the Far East ships to the central regions of the country hoisting and transporting machinery, diesel generators, drilling rigs, etc. However, the further development of Far Eastern machine-building requires the reinforcement of its own metallurgical base. The remodeling of the Amurstal' Plant and the building of a new reduction plant in Komsomolsk-na-Amure will only partially resolve the problems of ferrous metallurgy.

And what if one considers the fundamentally new basis of its development -- the continuous casting and stamping of a broad variety of parts? The schemes that have been developed by VNIImetmash and the institutes of USSR Academy of Sciences are already being employed at certain enterprises and have been yielding a rather large economic benefit and freeing labor resources.

The basis of the buildup of industrial might is a reliable energy base. Large-scale and energy-intensive consumers of the United Energy System of the East sometimes experience a shortage of energy, and yet, within the near future, it will be necessary to electrify the BAM and the Far Eastern Metallurgical Plant will be activated. The stable supplying of energy and heat will depend on the degree of promptness with which several thermal electric-power plants and the units at the Bureyskaya GES will be activated.

[Question] Actually, it has been planned to building a rather large number of thermal electric-power plants. But what will be used to "feed" them? Will millions of rubles be spent again to transport coal?

[Answer] We have already begun to build a main gas pipeline from Okha to Komsomolsk-na-Amure, the first phase of which will begin to operate in 1986. The use of gas will expand. However, within the foreseeable future, the coal industry will remain the base for the region's fuel and energy complex. But it will not be necessary to transport coal. The computed reserves of coal that we have come to 13 billion tons, and, moreover, the coal to a considerable degree can be mined by the open-pit method. But that's the problem: for the time being, the local need for solid fuel is frequently satisfied by bringing in shipments from the trans-Baykal area and East Siberia.

In our opinion, it is completely possible to get by with local Far Eastern coal. The computations and forecasts do not deceive us. It is only that the impression is created that USSR Ministry of the Coal Industry is not rushing to consider these problems. For example, the Urgal'skaya Mine in Khabarovsk Krai has been undergoing remodeling for more than 15 years. The Bureinskiy Coal Basin is being assimilated at an inadmissibly slow rate. The geological prospecting and exploratory operations are lagging behind, although the region will be needing coal deposits for many years to come.

[Question] The reasonable question arises: can the proper benefit be provided by the various comprehensive programs that have been developed by scientists jointly with the local party and Soviet agencies, if the branch development is going to be directed along their own departmental paths?

[Answer] The problem of the "branch to region" interrelationships is becoming more and more acute. Without a nationwide, strategic approach to the development of the Far East, it will scarcely be possible to achieve the complete use of its economic potential.

It is necessary to change fundamentally the idea that the region is an inexhaustible raw-materials base -- whether it be for the extraction of ore, timber, or fish and other products from the sea. This narrow branch approach is fraught with economic errors and omissions. For example, the timber management workers leave behind them millions of cubic meters of wood which is completely suitable for use in the national economy. And how many lances have been broken in the discussions about saving the cedars! However, the proper procedures have not yet been introduced in cedar forests.

Or let's return to fishing. The Far Eastern region accounts for almost 40 percent of the nation's production of fish and other products from the sea. It will be necessary to increase that production in the future. However, it is one thing to catch the fish, and another thing to process it. For the time being, it is only with difficulty that the shore-based specialized production entities can keep up with the fishing boats.

[Question] It seems, then, that whatever sphere of the Far Eastern economy we project for the future, it is always necessary to build or reinforce its own base. . . .

[Answer] Of course, the power of a modern construction complex cannot be compared with those weak forces that used to exist. However, the volume of long-term construction, as is indicated by the same "Far East" program, persistently requires the organization of those mobile subdivisions that could keep up, for example, with the famous Bratskgesstroy.

It is no accident that the construction workers from Bratsk have come to mind. At the present time people from Bratsk are working alongside of representatives of other organizations in the construction of the TETs-3 in Khabarovsk. But it is by no means just by the building of one electric-power plant that one can complete the comprehensive program in the region's power engineering. Does that mean that now it will be necessary for us each time to hope for specialists from the outside? No, it is obvious right now that the Far East needs its own general contractor -- a strong construction collective.

The vital importance of the problem is intensified even more by the fact that one observes the beginning of the process of the active economic assimilation of the zone along the Baykal-Amur Mainline. If the purely branch tactics in the placement of the construction forces begin to prevail there also, it will be difficult to achieve a rapid effective return.

[Question] The opening of through traffic along the BAM route is planned for this autumn. And although it is rather early to assume that the history of the great construction project has been completed, it is evidently time to publicize the experience of this 10-year epic. What part of this experience could be used in the future in the Far East, at large construction sites?

[Answer] There is a large number of such socioeconomic accumulations. Something that is interesting and valuable for the future, for example, is how, in the course of the construction of the mainline, the problem of labor resources was resolved. The previously formed highly qualified construction collectives from the sponsoring republics and oblasts demonstrated their mobility and their personnel stability. Because it is no secret that a region's national economy incurs losses not only because the shortage of working hands, but also as a consequence of personnel turnover. The BAM experience in this regard should be carefully studied and introduced.

The increase in production in the Far East must be achieved primarily by means of the introduction of scientific-technical innovations, mechanization, and economical and highly effective technological processes. But there will always be a need for new working hands.

The romantic and, to a certain extent, exotic attractiveness of the Far East for thousands of young men and women will acquire a real basis for their future life when every person who arrives here is convinced that he or she is not only needed, but is also someone we have been expecting for a long time.

As the first part of our country that greets the new day, the Far East always looks toward the future. Its economic potential makes it possible to look far ahead, to construct optimistic plans and long-term forecasts. Our country's power will be strengthened even more by the might of the Far Eastern region.

#### Session on BAM Problems

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 26 Sep 84 p 2

[Interview by SOTSIALISTICHESKAYA INDUSTRIYA special correspondent N. Il'inskaya: "BAM: Finish Line Before the Starting Line"]

[Text] Recently a session of the Politburo of the CPSU Central Committee considered the question of accelerating the rates of assimilation of the natural resources situated in the area of the BAM, and the development there of new branches of production. The tasks that were assigned and the ways to implement them became the object of discussion of a special out-of-town session of the USSR Academy of Sciences Scientific Council for Problems of the BAM. The participants in that session included party, Soviet, and economic administrators in the krays and oblasts through which the mainline runs.

"The session of the Politburo of the CPSU Central Committee emphasized the need to resolve the questions not only from the positions of the immediate future, but also with a consideration of the tendencies for long-term

development, where the area of the BAM is going to be a new highly developed zone in our country, and a base for the assimilation of the very rich resources of the North," Academician A. Aganbegyan, chairman of the USSR Academy of Sciences Scientific Council for Problems of the BAM, said. "The joining together of the rails along the entire mainline does not mean the end of the construction. Yes, it will open up train traffic from [Lake] Baykal to the Amur. But there still lies ahead one-third of the total construction-and-installation operations which are supposed to guarantee the attainment of the final goal: the permanent activation of the entire mainline, with its numerous bridges and tunnels, auxiliary services, and enterprises. Therefore the specialists define the joining up of the tracks as the entry into the final stage of construction.

"The BAM is not simply 'two rows of tracks.' It is necessary to build well-planned cities and settlements, to activate electric power plants, mines, and plants, and to assimilate the land that is suitable for agriculture -- all this is contained in the comprehensive target program for economic assimilation."

[Question] The joining up of the mainline urgently necessitates the resolution of a number of problems. For example, construction workers today are agitated by the question: where will we be working? Where will the construction-and-installation trains that have been solidly united by the many years of joint work be moving to?

[Answer] "There are several alternatives in this regard. It is necessary to accelerate the final selection of the BAM forces to be applied, in order to prevent the dispersal of the well-knit collectives that have passed the test under severe conditions. The railroad mainline opened up access to the natural treasure chests of Siberia and the Far East. Large-scale projects have been carried out, to study the mineral and other natural resources. Scientists have prospected and prepared for assimilation the reserves of iron ores and coking coal that make it possible to create on their basis a large-scale metallurgical base. Plans are already prepared for the first-priority assimilation of the mineral resources that have been discovered in the area of the BAM. There is also a practical example -- the South Yakutsk Territorial-Production Complex has been formed. Power has already been supplied by the first unit of NeryungriGRES, which operates on coal from local pits; and the technical-economic substantiations for the laying of a Berkakit-Tommot-Yakutsk railroad have been developed. Thus, there will be no break in time between the end of the construction of the mainline itself and the beginning of the assimilation of the area adjacent to it."

[Question] The territory through which the mainline runs is ecologically very vulnerable. What do the scientists propose for protecting the environment? I asked Academician V. Kuznetsov, deputy chairman of the Scientific Council, to answer this question.

[Answer] "The biosphere can be reliably protected against the harmful effect of developing industry by the creation of ecologically safe, waste-free production entities -- or, at first, those having relatively small amounts of waste," Valeriy Alekseyevich said. "Considering that 40-45 percent of all the

water consumed by industry is expended for heat-exchange processes, it is necessary to make wider use of more economical systems for air and water-and-air cooling. We have all justifications right now for failing to approve construction plans and for banning the construction of new enterprises if they do not provide for closed water-recycling systems. It must be remembered that the low temperature and weak biological activity rate in the waters in the BAM area reduce the activity rate in the self-purification of the bodies of water. This creates the threat that they will be rapidly polluted. A study of the climatic peculiarities of the air-mass circulation has made it possible to isolate territories with a large potential pollution of the atmosphere. They are the Charskaya, Muyskaya, Verkhne-Angarskaya, and Baykal'skaya foundation pits.

"The broad introduction, for example, of continuous-action sorption, ion-exchange, and especially membrane processes will make it possible to create highly effective waste-free technological schemes for power engineering, the chemical industry, metallurgy, and the food and light industry. Life shows us that it is more beneficial to expend funds not to combat the consequences of the pollution of the environment, but to invest them into the creation of ecologically clean technological schemes."

[Question] The Eastern sector of the BAM area is distinguished by more favorable natural and climatic conditions and by a high concentration of natural resources. What kind of immediate future do scientists see for this region that is so important for the entire country's economy, I asked Corresponding Member V. Chichkanov, director of the Institute of Economic Research, of the Far Eastern Scientific Center of the SO [Siberian Branch] of the USSR Academy of Sciences.

[Answer] "Our institute has prepared a comprehensive program for the assimilation of the Eastern part of the BAM for the long-term period until the year 2000. That program provides for the creation of a chain of territorial-production complexes. In particular, it is planned to increase the production of stone coal, to assimilate the deposits of ores and other mineral raw materials, and to establish timber complexes. The Eastern sector of the BAM alone accounts for one-fifth of our country's timber resources. Of that amount, almost half is made up of coniferous species, the especially valuable ones.

"Far Eastern geologists have prepared a map of mineral resources. More than 20 different types of mineral raw materials have been discovered in the region. There are especially numerous deposits of iron ore. Moreover, many of them are situated close to the mainline, and this facilitates access to the underground storerooms.

"According to our estimates, it would be possible by means of the assimilation of the new land in the southern part of the region to achieve a considerable expansion of the plowland, to increase the number of head of cattle, to completely supply the population with milk and potatoes, and to raise the level of consumption of meat and vegetables from local resources. That will make it possible to create a food supply base in the BAM area. . .

"The construction project of the century is not ending with the driving in of a 'golden spike.' It is entering a new phase -- the assimilation of the natural wealth of Siberia and the Far East."

#### Siberian Development

Moscow EKONOMICHESKAYA GAZETA in Russian No 40, Oct 84 p 8

[Article by Academician A. A. Trofimuk, first deputy chairman of the Siberian Branch of the USSR Academy of Sciences, "Siberia" Program director: "The 'Siberia' Program"]

[Text] The USSR State Committee for Science and Technology and the Presidium of the USSR Academy of Sciences have adopted the decree "The Approval of the Basic Assignments of the 'Siberia' Regional Scientific-Research Program."

I shall state immediately that the Siberian scientists have been waiting a long time for this event. They have been waiting and preparing for it. The fact of the matter is that the program began to form immediately after the decree of the CPSU Central Committee, entitled "The Activity of the Siberian Branch of the USSR Academy of Sciences in Developing Fundamental and Applied Research, in Increasing Its Effectiveness, in Introducing Scientific Achievements into the National Economy, and in Training Cadres," and from the very first the program provided for two main factors: broad scope and future prospects. And the chief practical task consisted in concentrating the scientific-research and planning-and-designing efforts in the chief areas of development of the economy in that part of the country.

With a Consideration of the Interests of the National Economy

The basis of the "Siberia" Program for the complete assimilation of the natural resources and the development of the productive forces of Siberia was formed by research projects in 41 very important scientific areas. And it must be stipulated that before they appeared in the program, the leading scientists in the Siberian Branch, in all branches of knowledge -- economists, geologists, physicists, mathematicians, chemists, and biologists -- carried out, in that vast region, a very unusual stocktaking of the scientific forces and capabilities; determined, together with the party and economic agencies and the branch departments, the first-priority tasks; and provided concrete answers to the question of who would resolve those tasks and how. The problems that first became the object of research were the problems of the effective use of the fuel-and-energy, mineral-raw-materials, biological, water, and timber resources, the protection of the environment, and the buildup of the region's industrial potential on the basis of the development of scientific-technical progress.

I think that the importance of this region for our country's economy does not have to be discussed in detail. The increasing role of the region has determined the fundamental principles that served as guidance during the development and implementation of the program. First, we consider each problem primarily from the point of view of its role in resolving the problems of nationwide importance. For example, what will be provided by the



resolution of the tasks that are outlined in the major areas and sections of the various programs -- "Petroleum and Gas of Siberia," "Coal of the Kuzbass," "Coal of the Kansk-Achinsk Basin" -- for the fulfillment of the country's Energy Program? How can we achieve the assigned final goal in the assimilation of Siberia's hydrocarbon raw materials, so that their production will proceed at rates that guarantee an increase in the country's total production? That kind of approach has proven its worth.

Secondly, the "Siberia" Program provides for involving in the work Siberia's entire scientific-technical potential, and the use of the capabilities of the scientific collectives in other regions of the country. We have obtained the opportunity to energize and coordinate both the academy's forces and their interrelationships with the branch subdivisions, as well as the institutions of higher learning. Today general goals and tasks unite the activities of the six scientific base centers in Novosibirsk, Tomsk, Krasnoyarsk, Irkutsk, Ulan-Ude, and Yakutsk, as well as individual subdivisions in other cities. The total number of organizations working on the "Siberia" program is 60 institutes and design bureaus of the Siberian Branch of the USSR Academy of Sciences and more than 350 organizations subordinate to 60 ministries and departments, including 13 ministries in RSFSR. Close contacts with the Siberian Branch's institutes dealing with agricultural topics are maintained on the basis of the subdivisions of the Siberian Branch of VASKhNIL [All-Union Academy of Agricultural Sciences imeni V. I. Lenin], and, for those dealing with medical topics, with subdivisions of the Siberian Branch of USSR Academy of Medical Sciences.

All these forces, in conformity with the basic goals of the "Siberia" Program, have been "locked into" the resolution of the problems that are part of such target subprograms as "Land Resources of Siberia," "Personal Health in Siberia," "Iron Ores," "Ecology and the Protection of the Environment," "Nonferrous Metals of Krasnoyarsk Kray," and other, no less important, objects of research and development. In the process of implementing the program, sections that have become a component part of it have been the sections dealing with the economic assimilation of the area near the BAM, the Food Program, and the questions of the socioeconomic development of the cities and rayons in Siberia.

In all this work a completely mandatory requirement has been, and continues to be, on the one hand, the basing of the work upon the deep, fundamental research carried out by all the institutes and subdivisions of the Siberian Branch of the USSR Academy of Sciences, which provide fundamentally new paths for the resolution of the technical and technological problems, and, on the other hand, the prompt conversion of the completed developments into state or branch annual and five-year plans. And this, in its turn, determines the basic principles of effectiveness during the practical implementation of the tasks stated in the program.

#### From a Scientific Search to Practical Life

In many sections of the program, substantial results have already been obtained. Suffice it to state that approximately 200 major projects, most of which were carried out within the confines of the "Siberia" Program, were

recently considered at a session of USSR Gosplan with regard to their wide-scale introduction. I would like to cite only a few of them.

Large capital investments under the difficult natural conditions are required, for example, by the process of exploring for and prospecting new deposits of mineral raw materials, primarily petroleum and gas. All the methods that are being widely used up to now to explore and prospect deposits of hydrocarbons are indirect ones, and, consequently, they do not provide a complete idea or accurate information about the deposits. The expenditures for deep drilling, which is the most reliable method as of today, usually constitute 70-80 percent of all the expenditures for the exploratory and prospecting operations for petroleum and gas. But the progress throughout the world is characterized by approximately the following indicators: out of 100 exploratory wells that have been drilled, the number of productive ones during the past 30 years has increased from 8-10 to 30.

Siberian scientists have found a way out in the direct geophysical methods being developed for exploring hydrocarbon deposits, and this guarantees an increase in the productivity of the wells to 70-80 out of every 100 drilled. It is precisely this method, which represents the combination of multiwave seismic reconnaissance and electrical reconnaissance, that is being used in the search for deposits in an experimental-industrial version in Western and Eastern Siberia. With the rapid modification of that version and its introduction throughout the country, one can expect a considerable economic benefit -- computed in the billions of rubles -- as a result of the reduction in the drilling of exploratory wells and the increase of their rate of results.

Most of the purely technological developments being worked on by Siberian scientists deal with the economizing of resources and labor. Underground hydraulic mining of coal, which was developed by scientists and practical specialists working together, increases labor productivity in the Kuzbass by a factor of 2.5, reduces the specific capital investments by 25-30 percent, and reduces the production costs of the mined coal by 15-20 percent. The introduction at the Tashtagol Mine of a system for the underground mining of ore that was developed by the Institute of Mining, Siberian Branch of the USSR Academy of Sciences, has made it possible to triple the labor productivity.

Important aspects of the fuel and energy problem are the economizing of fuel and the reduction of the pollution of the atmosphere by noxious products. Science has developed a fundamentally new technological process for the combustion of fuels in apparatuses with a boiling stratum of spherical granules of a complete-oxidation catalyst -- catalytic heat generators. These apparatuses can be used in many branches of the national economy to carry out such technological processes as the heating and evaporation of liquids; the drying of powder materials, including coal and agricultural products; the processing of brown coal varieties with the simultaneous production of semicoke; and the synthesizing of gas.

I have mentioned only a few developments produced by Siberian scientists. One could boldly add to them many other promising projects that were developed by

means of the joint search carried out by the academy's scientists and those in the branches of industry. They reflect the very essence of the strategy and directedness of the paths toward the greatest effectiveness of the use of scientific-technical potential. These developments include the resolution of the problems of construction under conditions of permafrost and the thorough processing of mineral and timber resources; problems of increasing the reliability of machinery for operations under conditions of Siberia and the North, the creation of new, effective growth regulators for plants and animals, and a unique method of thermochemical treatment of diamonds.

#### Improving the Interaction

The "Siberia" Program has achieved nationwide status. This opens up new opportunities for the creative coordination of the research and the concentration of the efforts of the scientific organizations of various departments and ministries. But this obliges us to assure an even greater mobilization for developing and improving the accumulated experience, for searching for and using new and unused reserves.

Computations on the basis of the existing methods of the effectiveness of the research and developments with regard to the resources, technical, and technological sections of the "Siberia" Program have indicated that every ruble of expenditures can produce no less than 20 rubles of economic benefit. But this requires the prompt transmission of the recommendations based on the results of the research projects and the recommended developments to the national economy; the reduction of the periods of time required; and the broad scope of their introduction into production practice.

Unfortunately, these conditions frequently are not observed, and the most serious discussions concerning the effective coordination of the region's scientific efforts are sometimes reduced to the simple recording of facts pertaining to who did what. This restrains the implementation of one of the basic principles of the "Siberia" Program -- the concentration of efforts in the decisive sectors for purposes of the rapid advancement of the scientific development into the plant shop, to the mine or construction site, to the kolkhoz or sovkhoz.

Taking this into consideration, the position of the coordinators and the lead department for the implementation of the "Siberia" Program -- the Siberian Branch of the USSR Academy of Sciences -- has been largely changing. Specific organizational steps are already being taken to assure the changeover to the annual submittal of the developments which are promising for the national economy and which have undergone experimental-industrial testing, for the purpose of including them in nationwide, republic-level, and branch plans. This largely increases the responsibility borne by the scientists and has an effect upon the more concrete approach to the job at hand.

One's hope is also inspired by the interest that has been shown to the developments of the Siberian Department of the USSR Academy of Sciences which have been proposed for introduction during the 12th Five-Year Plan -- that is, the interest on the part of the branch staffs of machine-building, the coal, petroleum, and gas industry, agriculture, and USSR Gosstroy. The ministries and departments have attentively considered our recommendations, have provided an evaluation of them, and for many specific items have undertaken the job of introducing them into production.

## REGIONAL DEVELOPMENT

### ALL-UNION CONFERENCE ON LOCATION OF INDUSTRY HELD AT GOSPLAN

Moscow PLANOVYE KHOZYAYSTVO in Russian No 7, Jul 84 pp 44-52

[Report by V. Varlamov and P. Semenov: "Problems in Locating the Country's Production Forces (An All-Union Scientific-Practical Conference in the USSR Gosplan)"]

[Text] The party and government have always paid great attention to the problem of the rational location of production forces. The resolution of these problems at the various stages in the building of socialism has promoted the fulfillment of very important political, economic and social tasks facing the country and progress in all the union republics and economic regions.

The urgency of problems concerning the location of production forces grows considerably during periods when long-term plans are drawn up because shifts in the territorial proportions of the national economy that produce results for growth in the efficiency of social production can take place only over a relatively prolonged period. Precisely for this reason, for long-term plans structural shifts are especially important, including those of a territorial nature that make it possible to reveal major reserves for economic growth. Speaking about the future--the 12th Five-Year Plan, whose basic directions and the basic directions for the following five-year plan are now being worked out by the country's planning organs--CPSU Central Committee general secretary K.U. Chernenko has stressed that "the new five-year plan should first and foremost mark the start of profound qualitative changes in production, and be a five-year plan signifying a decisive turning point in intensification in all the sectors of our national economy. The present-day material-technical base and the management system should take on new and better qualities."<sup>1</sup> As CPSU Central Committee Politburo member and Central Committee secretary M.S. Gorbachev has noted, "it is necessary to subordinate policy in the field of capital investments, improvements in the structure of production and the location of production forces to the compilation and implementation of major comprehensive, goal-oriented programs."<sup>2</sup> The new and better qualities of the present-day material-technical base should also include optimization of its territorial structure.

1. "Materialy vneocherednogo Plenuma Tsentral'nogo Komiteta KPSS, 13 fevralya 1984" [Materials on the CPSU Central Committee Extraordinary Plenum of 13 February 1984], Moscow, Politizdat, 1984, p 16.
2. PRAVDA 1 March 1984.

It is, therefore, not happenstance that work on the location of production forces has become an inseparable and essential part of the total system of preplanning work and long-term planning. By confirming the significance of territorial problems for today's practical work in planning and management and for their improvement, this fact is also important, on a staged basis, for the development of scientific sectors researching this problem. Practical needs act as a powerful stimulus for activating research on the problems of location and they require a higher level of scientific work, reinforcement of their constructive nature, and solid justification for recommendations.

An all-union scientific-practical conference "Problems of and Prospects for the Rational Location of the USSR's Production Forces" that took place 21 through 23 February 1984 in the USSR Gosplan showed the main direction of basic efforts by scientific and planning organizations dealing with the problems of the location of production with respect to long-term questions and the preparation of proposals for the long-term plan. The conference, organized by the USSR Gosplan Council for the Study of Production Forces (SOPS) and the USSR Academy of Sciences Presidium Commission for the Study of Production Forces and Natural Resources (KEPS), discussed key problems in improving the location of production forces in the long term in light of CPSU economic strategy and in connection with work on the draft Main Directions for the Economic and Social Development of the USSR Through the Year 2000.

Leading workers from the USSR Gosplan and the union republic gosplans, scientists from institutes subordinate to them and to the USSR Academy of Sciences and the Siberian Department of the USSR Academy of Sciences and from the scientific centers and branches of the USSR Academy of Sciences and the union republic academies of sciences, and leading workers from the USSR ministries and administrations and from their leading planning and scientific research institutes and from party and economic organs, took part in the work of the conference.

The conference heard and discussed 26 reports on urgent questions concerning the development and location of the USSR's production forces, regional problems in scientific and technical progress, and social problems in the country as a whole and in all the union republics.

Opening the conference, USSR Gosplan chairman N.K. Baybakov stressed that in advancing the rational location of production as one of the most important problems in the building of socialism, V.I. Lenin linked its solution with a major condition in the triumph of the new order, namely raising the productivity of social labor.

Priority in working out the scientific bases for the planned location of production forces on the national scale belongs to Soviet science. Proceeding from the specific, urgent tasks of the building of socialism in our country, first the most important principles were worked out for economic zoning, and fundamentally new forms were created for the territorial organization of production forces, namely the territorial-production complexes. On the plane of GOELRO [State Commission for the Electrification of Russia, 1920--ed] the most important, basic methodological instructions for the rational location of production forces were worked out during compilation of the 1st Five-Year

Plan on the basis of Lenin's ideas as part of Gosplan's first work; and to this day we are still guided by these instructions.

The first all-union conference devoted to discussion of urgent questions in the location of production forces was held in 1932. During the intervening period major problems concerned with improving the location of production forces in the country have been resolved, among which the most substantial have been equalizing the levels of economic and social development in the national republics and shifting industrial and agricultural production to the regions in the east.

For the upcoming period the urgency of problems involving improvements in the location of production forces has stemmed from a number of circumstances reflecting the features of the country's economic and social development at the present stage. These include first, the sharp differentiation in manpower growth in the different regions of the country. Second, most regions of the European part of the country, which has the largest proportion of the production potential, are typified by shortages of fuel and energy, water, and a number of raw material mineral resources. Third, the territorial discreteness of the three basic and closely interconnected elements of production, namely manpower, fixed capital and the main reserves of fuel and energy and mineral raw materials, is considerably exacerbating the transportation problem.

N.K. Baybakov noted that the main task for the conference was to discuss the main directions in improving the location of production on the basis of the proposals put forward in the comprehensive program for scientific and technical development through the year 2005, and also on the basis of sector and territorial schemes and the general scheme for the location of the USSR's production forces for the period through the year 2000.

Of the most general characteristic features of the conference, the following were defined precisely:

--most reports and communications were the result of preplanning work in a long-term and practical direction (sector and territorial schemes, comprehensive programs, the general scheme for the development and location of the USSR's production forces). Work on these preplanning documents has been done by a number of USSR Gosplan and union republic gosplan institutes, the USSR Academy of Sciences and its departments, scientific centers and branches, and ministry and administration scientific and planning organizations;

--a link was established between the general scheme for the development and location of the USSR's production forces and the comprehensive program for scientific and technical progress in the USSR covering the period 1986-2005, and the first regional sections of this program drawn up. The importance of this factor in practical preplanning work is that for the first time using such an extensive range of material an attempt was made to analyse, on the one hand, the effect of scientific and technical progress on the territorial organization and structure of production, and on the other the specific regional requirements being made of technical progress. These questions were the subject of a special review in the report of the chairman of the USSR Academy of Sciences Presidium KEPS, academician N.N. Nekrasov (now deceased).

Consideration of the questions concerning the location of production forces against the broad backdrop of general economic problems shows that for all its importance, the location of production is not an end in and of itself but one of the means used to generally improve efficiency in the national economy.

On this plane, the reports of the director of the USSR Gosplan Scientific Research Institute of Economics V.N. Kirichenko entitled "Features and Directions of the Socioeconomic Development of the USSR Through the Period to the Year 2000," the deputy chairman of the USSR State Committee for Labor and Social Problems L.A. Kostin "The Location of Production Forces and the Rational Utilization of Manpower," and USSR minister of geology Ye.A. Kozlovskiy "Strategy in the Development of Geological and Surveying Work in Order To Develop the Mineral and Raw Materials Base of the USSR National Economy" were significant.

Among the key problems considered by the conference, considerable interest was raised by question concerning the long-term development and location of the most important sectors of the national economy and industry, and also territorial proportions in material production. These questions were also reviewed in a general report by the chairman of the USSR Gosplan Council for the Study of Production Forces VASKhNIL academician V.P. Mozhin entitled "Main Directions in Rationalization of the USSR's Production Forces" and in reports dealing with major intersector complexes and the most important production sectors, presented by deputy chairman of the USSR Gosplan A.M. Lalayants (on the program for the development and location of the USSR's fuel and energy complex), chief of the USSR Gosplan Ferrous Metallurgy Department M.G. Anan'yevskiy (on key problems in the development and location of ferrous metallurgy), chief of the USSR Gosplan Chemical Industry Department M.G. Vasil'yev (on problems concerning the development and location of the chemical industry), VASKhNIL academician V.A. Tikhonov (on the main directions and problems in the location of the USSR agro-industrial complex), deputy chairman of the USSR Gosstroy I.I. Ishchenko (on key problems in the development and location of the USSR construction complex) and director of the USSR Gosplan Institute of Complex Transportation Problems , B.S. Kozin (on basic regional problems in the development of the USSR's transportation complex).

One of the most important all-union territorial proportions both now and for the future is still the division of labor between the western and eastern regions within the country's unified national economic complex, corresponding to the directions, rates and scales of their economic development.

The conference showed that general directions in the development formulated in the decisions of the 26th CPSU Congress for the European regions, Siberia and the Far East, Kazakhstan and Central Asia for the 11th Five-Year Plan will retain their importance for the long term also. This conclusion was confirmed in the reports that were the result of long-term work in all the country's republics and economic regions.

The conference reviewed the main directions in the socioeconomic development and location of production forces in the RSFSR (the report by L.A. Kozlov, director of the RSFSR Gosplan Central Economics Scientific Research Institute), problems concerning the economic and social development of the Ukrainian SSR

under conditions of intensification in the national economy (a report by academician of the Ukrainian SSR Academy of Sciences A.N. Alymov, chairman of the Ukrainian SSR Academy of Sciences SOPS [as published; should probably read KEPS--ed]), the features and directions of the economic and social development and the location of production forces in the Belorussian SSR (a report by F.A. Dronov, director of the Belorussian SSR Gosplan Scientific Research Institute of Management Problems), key problems in the economic and social development and location of production forces in the Baltic economic region (a report by P.V. Gulyan, deputy director of the Latvian SSR Academy of Sciences Institute of Economics, V.L. Gerbov, department chief in the USSR Gosplan SOPS, A.A. Merchaytis, deputy director of the Lithuanian SSR Gosplan Institute of Economics and Planning, and V.Yu. Tarmisto, director of the Estonian SSR Academy of Sciences Institute of Economics), the main directions in the economic and social development of production forces in the Moldavian SSR (a report by V.G. Kutyrkin, chairman of the Moldavian SSR Gosplan), and key problems in the development and location of production forces in the Urals (a report by M.A. Sergeyev, director of the USSR Academy of Sciences Ural Scientific Center Institute of Economics).

It was noted that in the European part of the country, with its highly developed production potential, the general direction of development should be improvement in the structure of the economy primarily on the basis of the reconstruction and retooling of existing enterprises, optimization of links between enterprises, improvement in the intersector proportions, and more efficient use of all kinds of natural and production resources.

Along with the law-governed patterns in the requirements of production intensification, this kind of approach to the task also stems from the inadequate supply of manpower, fuel and energy resources and water resources in most regions of the European zone.

Whereas previously this zone accounted for more than half of all-union manpower growth, in the long term it will fall sharply, and this will create a qualitatively new situation from the viewpoint of the location and expansion of production.

In the coming decades the availability of local energy resources in the European regions of the country will also decline substantially. Implementation of an energy-saving policy and limiting the development of energy-intensive production facilities in the European zone constitute only some of the measures aimed solving this problem. Nuclear power engineering must be developed more strongly. In accordance with the Energy Program, the construction of nuclear power stations there will in the long term make it possible to reduce the consumption of organic fuel by 500 million tons (expressed in standard units) annually. At the same time it will be necessary (although not at present rates) to increase supplies of energy resources, especially gas and electric power (via the interregional power transmission lines from Ekibastuz and from the KATEK [Kansko-Achinsk fuel and energy complex] stations) from the eastern regions. All this will require considerable resources.

Because of this, very great importance attaches to the zone's utilization in every possible way of its own energy potential. In the future the new energy base should be the Caspian province.



Finding a solution to the water problems in the European zone will require large-scale work to construct new canals, reconstruct water reservoirs, and divert some of the flow from the northern rivers into the Volga basin. Water-conservation measures can and should provide the greatest effect.

Under these conditions, the demand to reduce the proportion of expenditures for manpower and raw material, fuel and energy and water resources is becoming particularly urgent for the European regions. The introduction of waste-free and low-waste technologies and combined production facilities in industrial centers and complexes at which the waste from one kind of production serves as the raw material for another, is acquiring great importance.

Important tasks need to be resolved in the European zone in the matter of further developing agriculture, since it is precisely there that most of all-union growth in products such as grain and meat should be insured.

To this end, along with the further consolidation and more efficient use of the material-technical base of the agro-industrial complex, major social tasks must be resolved. In the Nonchernozem zone it is necessary to sharply limit the development of new production capacities not associated with the production and processing of agricultural output. In addition to the problems common to the entire zone, each of the European regions has its own specific tasks. Thus, it was noted in the reports of professors V.D. Akhundov, M.A. Adonets and Ye.D. Silayev and doctor of economic sciences K.N. Charkviani that in the Transcaucasus one of the most important problems is the need to make rational use of manpower, which in the long term will grow substantially, primarily in Azerbaijan and Armenia; it is proposed that this problem be resolved by developing the labor-intensive but not metal-intensive sectors of machine building, further developing agriculture, improving the shift coefficient in enterprise operations, and accelerated development of services of all-union significance.

Much attention was devoted to the problems of the country's eastern regions. Academician A.G. Aganbegyan presented a report entitled "Siberia within the Unified National Economic Complex of the USSR During the Period Through 2000-2005," and corresponding member of the USSR Academy of Sciences V.P. Chichkanov presented a report entitled "The Program for the Economic and Social Development of the Far East During the Period Through the Year 2000."

Taking into account Siberia's role in the all-union balances of fuel and energy, raw material and water resources and the manpower situation, the most important directions in the development of this region remain increased specialization in fuel recovery, the generation of electric power, and the fuel and energy generating industries, with restriction on the labor-intensive sectors. The accelerated development of sectors requiring fuel and electric power will promote a relative decline in the costs of transporting fuel, greater comprehensiveness in Siberia's economy, and improved efficiency in social production. Very great importance attaches to the introduction of the achievements of scientific and technical progress and the advanced forms of territorial organization of production so as to reduce expenditures on the assimilation, processing and transportation of Siberian resources. Regional

technical policy should take into account the features of this new stage in the development of West Siberia's oil-and-gas complex, the Kuzbass coal industry, and the shaping of the Kansk-Achinsk fuel and energy complex.

The generation of electric power should increase mainly through bringing on stream the country's largest condensing power plants on the basis of the cheap coals in the Kansk-Achinsk basin and the construction of natural-gas- and casing-head-gas-powered electric power plants in Tyumen Oblast to provide electricity both for that region and for the Urals. In addition, it is necessary to insure regional matching of the generating capacities at the KATEK GRES and the GES's in the Angaro-Yenisey basin.

This entire range of measures will not only make it possible to guarantee basic supplies of fuel for the regions of the country where there are shortages but will also provide an opportunity for fully covering the regions' own rapidly growing demand for electric power, primarily for the development of nonferrous and ferrous metallurgy and the chemical, petrochemical and pulp-and-paper industries and other energy-intensive production facilities.

Completion of construction on the Baykal-Amur Main Railroad Link [BAM] will bring great changes to the national economies of Transbaykal and the Far East. The cost of constructing BAM will be recouped more fully and more quickly if it is used not only as an extra interregional transportation artery but also to shape a new industrial zone whose development should be effected in accordance with the program that has been drawn up.

In the long term the role of the Far East will grow even more in the country as an all-union base for fisheries and products from the sea.

One very important condition for the realization of these directions in the development of Siberia and the Far East is strengthening the construction base and construction personnel. One decisive factor in attracting personnel, and even more in keeping them, is the accelerated development of the social infrastructure. This requires special measures to develop agriculture and the entire agro-industrial complex in order to satisfy consumer demand for foodstuffs through local production. Reserves of an organizational and economic nature must also be mobilized. The fully authorized representatives of the USSR Gosplan in the economic regions in the east of the RSFSR should play a major role in solving the complex problems.

The Kazakh SSR possesses great energy resources. Combining them with nonferrous metal and chemical raw material reserves will create favorable conditions for the rapid development of nonferrous metallurgy and the chemical industry there. Problems concerning the further development and location of production forces in Kazakhstan were dealt with in a report by professor E.A. Turkebayev, director of the Kazakh SSR Gosplan NIEIPiN [expansion unknown; possibly Scientific Research Institute of Economics, Planning and Standards].

Tasks in the further development and location of production forces in Central Asia were reviewed in a collective report by academician of the Uzbek SSR Academy of Sciences S.K. Ziyadullayev, doctor of economic sciences D.B. Bayramov, doctor of economic sciences G.V. Kopanov, candidate of economic

sciences N.K. Kayumov and candidate of economic sciences A.D. Termechikov. Central Asia's economy is today characterized by a multisector development of industry and highly mechanized agriculture. While possessing only 6 percent of the territory and 10 percent of the population of the country, this region produces 90 percent of cotton, natural silk and karakul, 100 percent of kenaf and means of mechanization for cotton growing, and a considerable amount of nonferrous and rare metals. Power engineering is being developed rapidly making use of local fuel and energy resources. During the process of drawing up a scheme for the development and location of production forces in the Central Asian economic region for the period through the year 2000, potential opportunities were revealed for economic growth in the region, and the priority problems were mapped out. The most important of these is to insure the rational use of the rapidly growing manpower. In particular, it is advisable to make Central Asia a major base for the production of cotton and silk fabrics. Cotton growing should remain a very important sector of all-union specialization. The Central Asian republics have great opportunities for the further development of nonferrous metallurgy and the chemical industry. It is essential to insure accelerated growth rates in the development of agricultural machine building, instrument building, electronics and other labor-intensive sectors of machine building. In addition, under the conditions of the pattern established in population settlement it is expedient to develop narrowly specialized production facilities and branches and shops for existing enterprises.

The republics of Central Asia should also play an important role in implementing the country's Food Program as a major all-union base for the production of vegetables, fruit, melons and grapes, and for the development of certain labor-intensive livestock farming sectors.

It was noted repeatedly at the conference (in the statements by V.B. Negrutsa, USSR Gosplan collegium member and department chief, and VASKhNIL academician V.P. Mozhin, chairman of the USSR Gosplan SOPS) that resolution of most regional problems and the assimilation of resources important for the country are being insured increasingly through the formation and development of territorial-production complexes [TPK] and industrial centers. This is making increased demands on scientific substantiations for the further development of TPK's already planned and on recommendations to form new, efficient production-territorial combinations. The planning of these complexes itself must be improved, along with control over the fulfillment of planning tasks. The main task is to achieve more effectiveness from plans for TPK's and to realize more fully the effect inherent in this form for the development of production forces.

The conference also revealed a number of gaps and weak spots in the development and realization of recommendations in the field of locating production forces. Thus, the fact was again confirmed that questions concerning the use of economic levers that stimulate the rational location of production forces remain poorly worked. An instruction on this problem as one of the essential directions in further research was recorded in the conference recommendations.

Much was said about shortcomings in practical work in the location of enterprises and the comprehensive development of the regions. Less attention was paid to analyzing why the existing procedure does not always "work" as it should,

and to how to improve planning for the location of production facilities and for the territorial organization of production forces in order to oppose narrow departmentalism and parochialism and to insure a truly national economic approach.

It was noted at the conference that there are still many methodological and method problems in the field of the location of production forces that require deeper study. The territorial aspect in the planned management of the economy needs further improvement. The soviets of working people's deputies, from the city and rayon level up to the union republic supreme soviets, should play an important role in this.

Schemes for the development and location of production forces, which have become the basic preplanning documents, are called upon to play a more important role in improving the combination of sector and territorial planning. Some changes have been introduced in the procedure for compiling these schemes, and in their content and legal status.

At the same time it was noted at the conference that many schemes still contain many defects.

In future work it is necessary to eliminate all these defects. There must be improvement in the method for drawing up schemes and the method for compiling regional programs for scientific and technical progress. The latter should not duplicate the schemes.

In addition it is necessary to confirm the legal status of work on the general scheme for the location of production forces in the USSR for a period of at least 15 years, and periodically (every 5 years) to work it out for the new period using a procedure similar to that used in work on sector and territorial schemes.

Questions connected with the management of the territorial-production complexes and the regional programs must also be resolved.

Another opinion was voiced at the conference. Many different kinds of documents regulating the solution of location questions are now in operation in the country. Accordingly, in the interests of further improving work on the territorial organization of the national economy it is essential to prepare a unified document that would define the procedure for the location of production forces within the country and at the same time make provision for measures to improve the quality of preplanning work and the grounds for developing and locating production forces both at the present stage and in the future.

Closing the all-union scientific-practical conference, deputy chairman of the USSR Gosplan N.P. Lebedinskiy summed up some of the results of its work. He noted that an extensive range of questions had been considered at the conference, touching on various aspects of improvement in the location of production forces in virtually all the most important intersector complexes, and also the union republics and economic regions. Unfortunately, at the same time not a single report had been presented on prospects for the development and location of machine building. Meanwhile, much detailed scientific and planning work has been done on the machine building complex.

It was noted many times at the conference that the shift of production forces toward the eastern regions of the country remains a general line in the field of location. Despite certain successes achieved in solving this large-scale task, there are many unutilized reserves. Serious problems are also arising during the course of implementation of another basically important direction in improving the location of production forces, namely the shift of labor-intensive industrial sectors to the regions in Central Asia, Kazakhstan and the Transcaucasus, where there is adequate manpower. These problems were dealt with in many reports and statements. Limiting the development of the major cities remains a most important task for the upcoming long-term period. Whereas in 1970 there were 10 cities in the country with populations of more than 1 million, there are now 22, and the small and medium-sized cities are growing only slowly. One reason for this situation is the increase in gigantism in some ministries and administrations and a desire to construct large enterprises that cannot be located in small cities.

Solving these very important problems requires the creation of a comprehensive method for substantiating and planning the location of production forces and drawing up a system of measures and indicators that would stimulate rational location. Ministries and administrations must under these conditions insure that it is profitable for them to construct their own enterprises in those regions where it is expedient from the standpoint of national economic interests. Improvements in the management system can also play a not unimportant role. It must be recognized that insufficient attention was given to these questions at the conference. It was noted at the conference that not all schemes are fulfilled at the proper level. The USSR Gosplan has had to return some of them for further work. Work on a whole series of schemes has been done with serious deviations from the methodological instructions confirmed by the USSR Gosplan, and this has seriously complicated their coordination. Thus, most schemes do not contain territorial material balances and optimized calculations. The USSR Gosplan has directed the attention of ministries and administrations in the union republics to the need to eliminate these and other serious shortcomings in work on these schemes.

In conclusion, N.P. Lebedinskiy noted that the conference had been an important stage in preparing that crucial document, the general scheme for the location of the USSR's production forces for the period through the year 2000, being drawn up in accordance with the decisions of the 26th CPSU Congress. The thorough discussion at the conference of the urgent problems of location had made it possible to prepare a whole series of proposals aimed at improving the territorial organization of the national economy for the purpose of further improving its efficiency.

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